

*The American*

# BAKER

PUBLISHED FOR THE BAKERS OF AMERICA

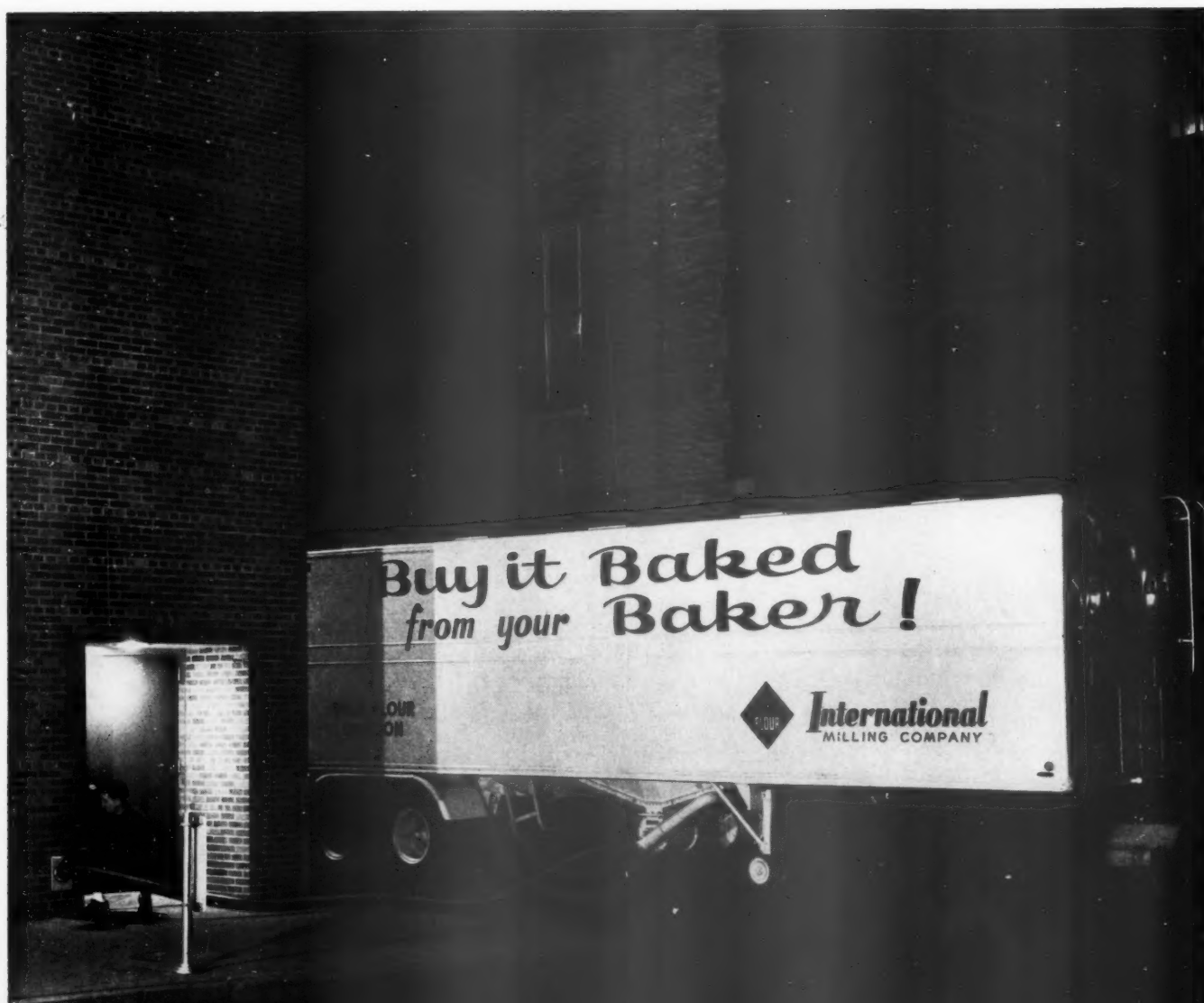
34th ANNUAL MEETING

American Society of  
Bakery Engineers

SPECIAL CONVENTION ISSUE



On-the-Spot Coverage—See Page 5



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## Most Major Bakeries Hike Sales, Profit

Net sales for the six largest chain bakery firms were up in all cases for 1957 over previous years, a tabulation of sales and earnings shows. Net profit also was generally up for the bakery portions of the firms' operations.

Earnings increased in 5 cases. Highest net earnings in the baking industry were again recorded by Campbell Taggart Associated Bakeries, Inc., Dallas, whose \$8,797,293 net profit is an all-time record for the industry. The 1956 net was also larger than any other baking firm, including those with net sales nearly twice Campbell Taggart's.

Detailed net sales and net profit figures for the six baking firms are shown below:

| AMERICAN BAKERIES CO.     |              |    |             |
|---------------------------|--------------|----|-------------|
|                           | 1957         |    | 1956        |
| Net profit .....          | \$ 5,832,104 | \$ | 5,076,590   |
| Net sales .....           | 150,370,756  |    | 144,413,649 |
| CONTINENTAL BAKING CO.    |              |    |             |
| Net profit .....          | \$ 7,761,715 | \$ | 7,512,423   |
| Net sales .....           | 307,876,750  |    | 284,206,892 |
| CAMPBELL-TAGGART          |              |    |             |
| Net profit .....          | \$ 8,797,293 | \$ | 8,240,441   |
| Net sales .....           | 155,166,205  |    | 147,003,051 |
| GENERAL BAKING CO.        |              |    |             |
| Net profit .....          | \$ 2,686,078 | \$ | 2,411,630   |
| Net sales .....           | 159,209,964  |    | 142,950,658 |
| INTERSTATE BAKERIES, INC. |              |    |             |
| Net profit .....          | \$ 4,046,721 | \$ | 3,516,818   |
| Net sales .....           | 113,224,927  |    | 106,379,091 |
| WARD BAKING CO.           |              |    |             |
| Net profit .....          | \$ 1,445,237 | \$ | 1,313,922   |
| Net sales .....           | 104,208,177  |    | 100,257,997 |

—BREAD IS THE STAFF OF LIFE—

## Red Star Yeast Announces Three Personnel Changes

MILWAUKEE—Three major changes in bakery sales personnel of Red Star Yeast & Products Co. have been announced by R. J. Skeffington, manager of bakery products division sales for Red Star at the firm's home office here.

Harold G. Mykles has been appointed to the newly created position of technical director for western region bakery sales. Mr. Mykles, who joined Red Star in 1954 as a bakery service technician, will operate out of the western region office in Los Angeles.

Frank M. Underwood has been promoted to manager of northwest division bakery sales, and will be located at the division office in San Francisco. Cal. Red Star's northwest division includes northern California, Washington, Oregon, Montana, Idaho and northern Nevada. Mr. Underwood joined Red Star in 1956 and served as assistant division manager.

Lewis E. Johnson has been appointed manager of north central division bakery sales, with headquarters in Milwaukee. The north central division includes Wisconsin, the Upper Peninsula of Michigan, Minnesota, North Dakota and South Dakota. Mr. Johnson, who started with Red Star in 1945 as manager of the Rochester, Minn. branch, has since served as manager of the St. Paul district and the Milwaukee district.

—BREAD IS THE STAFF OF LIFE—

### DIVIDEND DECLARED

NEW YORK—Directors of Ward Baking Co. have declared the firm's regular quarterly dividend of 1% on Ward preferred stock, and 25¢ on common, payable April 1.

## BAKING INDUSTRY'S POUNDAGE UP

CHICAGO—The baking industry is recording an increase in bread production, according to information released by the American Bakers Assn., based on 25% of all the bread produced weekly for sale by all bakeries and chain stores. The ABA's report on the trend of production of bread and other yeast raised products compares the years 1956 and 1957, and shows a total increase of 1.4% in pounds produced for the year 1957 over 1956. However, starting with the first week in October, 1957, production dropped behind the previous year except in the eastern region.

## Bakery Union Reelects Cross To Presidency

CINCINNATI—James G. Cross has been reelected without formal opposition to the presidency of the Bakery and Confectionery Workers International Union which was expelled last December from the AFL-CIO on charges of domination by corrupt influences.

Mr. Cross has headed the 172,000 member union since 1953. The union's expulsion from the AFL-CIO followed its refusal to remove Mr. Cross from office for misuse of union funds disclosed last year by the Senate rackets committee.

Alex White of Buffalo, N.Y., who had been nominated for the presidency in opposition to Mr. Cross, withdrew his candidacy before the vote was taken. On a rollcall 3,124 votes were recorded for Mr. Cross and 493 were listed as abstaining.

There were 450 delegates participating in the voting, the number of votes cast by each determined by membership in their local unions. Those who abstained said they had been instructed by their locals to oppose Mr. Cross but were left with no way to do so by White's withdrawal.

Peter H. Olson, who has been serving as acting secretary-treasurer with Mr. Cross' support, was elected secretary-treasurer with 3,523 votes to 95 for John Edens of Eugene, Ore.

## VICE PRESIDENT NIXON HONORED DURING RETAIL BAKERS WEEK WITH SPECIAL CAKE

WASHINGTON—National Retail Bakers Week activities came to a climax on Capitol Hill in Washington March 5 when Vice President Richard M. Nixon received a delegation of retail bakers in his Senate Building offices. The bakers brought with them an artistically decorated 75-lb. cake iced in patriotic colors and inscribed "With Best Wishes to Our Vice President."

Formal presentation was made by "Little Miss Muffin," 8-year-old Karen Woodcock, 1958 mascot of the Associated Retail Bakers of the Greater Washington, D.C., area. She was introduced by Charles J. Schupp, Schupp's Pastry Shop, Washington, ARBA president.

Mr. Schupp extended to Mr. Nixon greetings and good wishes of America's retail bakers, as well as special greetings from local retail bakers' associations in Mr. Nixon's home state, the Central California Retail Bakers Assn., East Bay Retail Bakers Assn., Master Bakers Retail Association of Los Angeles County, Retail Bakers Association of Sacramento, Retail Bakers Association of San Francisco, and the San Diego Retail Bakers Assn.

Mr. Schupp called Mr. Nixon's attention to the fact that the baking industry uses huge quantities of ingredients originating on the farm, and thus has long been the farmer's best customer. Principal aim of National Retail Bakers Week, Mr. Schupp stated, is to encourage greater consumption of farm products—in the form of taste-tempting baked foods. Accompanying Mr. Schupp and Karen to the vice president's office were William A. Quinlan, ARBA general counsel and Washington representative; the officers of the Associated Retail Bakers of Greater Washington, and Karen's parents.

## New York Promises Royal Welcome, Lavish Program For ARBA April 27-30

"Something for everyone" could well be the theme of the 1958 annual convention and exhibition of the Associated Retail Bakers of America scheduled in New York April 27-30. Aside from the attraction of New York itself, the convention will offer a wealth of panel discussions on vital trade topics, the elaborate crowning of a national "Little Miss Muffin," banquets and the traditional president's reception. In addition to the foregoing, allied tradesmen are expending considerable time and effort to present a highly entertaining and informative breakfast session, along with numerous services planned for convention delegates.

A National Little Miss Muffin will be crowned at the ARBA opening dinner April 27 in the grand ballroom of the Hotel New Yorker. She will be selected from a group of girls between the ages of six and eight being chosen to help celebrate the recent National Retail Bakers Week.

Twelve youngsters have already been selected to represent city and state associations in the competition for the national title. The first Miss Muffin chosen was Susan Busken of Terrace Park, Ohio. She will represent the Cincinnati association.

Among other entrants expected are youngsters from Oakland, Cal., Philadelphia, New Orleans, St. Louis, Chicago, Pittsburgh, Greater Washington, D.C., Nassau and Suffolk Counties, L. I., the Bronx, Manhattan, Queens, and Brooklyn.

To commemorate the occasion, each Little Miss Muffin will receive a gold medal suitable for a charm bracelet. The national winner will be given an RCA television set.

The finalists will be judged during the dinner by Jack Barry, well-known television quizmaster, and two other persons to be selected.

### Allied Breakfast

Al Schacht, noted "Clown Prince of Baseball," is scheduled to entertain at the Allied Trades of the Baking Industry breakfast scheduled for 8 a.m. Tuesday, April 29, at the Hotel

New Yorker. His appearance is being sponsored jointly by the Allied Trades of the Baking Industry, Inc., and New York ATBI Division 5. Arrangements for the breakfast are being made by William H. Welker, Swift & Co., president of the New York division, and Claude A. Bascombe, ATBI secretary-treasurer.

Advance interest in the breakfast indicates that it will be one of the best-attended events in the convention program. The personal popularity of Mr. Schacht is one reason why the sponsors are expecting a sell-out. The original "Clown Prince of Baseball" is the best known sports comedian in the country, having appeared before an estimated 60 million fans as the featured pre-game attraction for 27 World Series and 13 All-Star games.

Two of the most interesting and educational features on the ARBA program will be an all-star skit on retail bakery salesmanship and an all-star panel discussion on the same subject. The script for the skit was developed by Richard Morgan, Utica, N.Y., and is being produced by William Schonleber, Aunt Jennie's Bake Shop, Rochester, N.Y., who was largely responsible for the production of the Bake-O-Rama at the Rochester Museum of Arts and Sciences.

Mr. Schonleber has called upon a well-known group of amateur actors from Rochester to play the parts of the sales girls and bakers in the skit. The skit is being directed by Thomas McCarthy of Rochester, who has had considerable experience directing successful theatre-in-the-round productions in New York state.

Mr. Morgan has signed four members for the panel. They will discuss the points brought out in the skit. They are: Ray Fiske, Electric Maid Bakery, Schenectady; Jack Lottman, Imperial Bake Shop, Ltd., Toronto; Rose Ebert, Ebert's Bake Shop, Rochester, and Mr. Schonleber.

In addition to its sponsorship of the Allied Trades breakfast and entertainment, ATBI and the N.Y. division have offered to staff the convention's helpful information desk in the lobby of the N.Y. Trade Show Building. "Ask Me—I Know" buttons will identify allied tradesmen who will be needed for this service. ATBI will also provide allied ushers for the Sunday, Monday and Tuesday sessions and for the president's reception.

### Panel Chosen

According to Jack Selig, program chairman for the ARBA convention and exhibition, a representative panel has been picked for the luncheon session of the multiple unit bakers which has been scheduled for Monday noon, April 28, in the North Ballroom of the Hotel New Yorker. The following retailers will be on this panel: Walter Jacobi, Ebinger Baking Co., Brooklyn, N.Y., chairman; Sam Pasternak, Cake Box Bakers, Kansas City; Richard W. Warner, Warner-Noll Bake Shops, St. Louis; Ken L. Hollis, Ann Palmer Bake Shops, Portland, Ore.; Edward Schissel, Stop 'n' Shop Bake Shops, Boston; George Snow, Ebinger Baking Co., Brooklyn; Russell Hanscom, Hanscom Bakers and Confectioners, Philadelphia.

A youth group of ARBA will lunch in the Boston Room of the hotel Tuesday, April 29.

## Comment . . .

. . . by Cooley

It's nice to see the baking industry once again affirming our faith that we are in a modern, up-and-coming industry, run by baker-businessmen and operating plants staffed with skilled managers producing quality foods efficiently. One cannot spend several days in the company of men such as these without being sure that baking, as an industry, is aware of the problems facing it and is moving to meet those problems.



F. W. Cooley, Jr.

Clues to this attitude were found during the recent meeting of the American Society of Bakery Engineers, when the meeting rooms were packed with those wanting to hear the latest dope on the air classification technique of flour milling; automatic equipment; the need for education, employee training, and work simplification; and advances in formulation and packaging.

Hints of the future were found in statements that the production manager might soon have to take over the "last stages" of package manufacture, when the wholesale bakery becomes equipped with package set-up machines, or perhaps equipment which will make an efficient selling package for cakes from a roll of flavored paper.

\* \* \*

*Incidentally, what's going to happen to the wrapping room foreman when the boss finds out he has wrapped the entire day's production of white cakes with a paperboard flavored with chocolate, or rum cakes in a cellophane that smells of bourbon?*

\* \* \*

A letter to the editor the other day mentioned that governments now look upon all earnings of their countries as their property. Evidently we should be satisfied with what's left. This growing urge on the part of government to use spending as the solution to any and all difficulties leads to such ridiculous situations as the Baltimore tax on advertising (now happily being rescinded).

Admittedly this tax affects publishers more than bakers, but most of you are wholesalers, and here's how you would be taxed under a similar law: Say you buy \$10,000 worth of newspaper space every year. The paper would bill you \$10,400 for that space and turn \$400 over to the city, adding \$200 of its own money. The space rate will have to be increased, and you will be paying 4% more for your advertising than the other wholesaler who parallels your routes, but does it from outside of town.

Can your profit allow such a 4% gift to your city? If so, can you use an advertising manager?

\* \* \*

*The size of the show the baking industry allowed to be stolen is illustrated by a recent estimate of frozen food sales: 400 million pot-type pies are produced a year, and 70 million fruit pies. The same source guesses that no more than 10% of these products were made by traditional baking firms. Of course some of these firms have since entered the baking industry, but they didn't start out as "bakers"; they moved into a void being ignored.*

\* \* \*

Thanks for reading. See you next month.

*Frank Cooley*

## Editorial . . .

### MORE MOUTHS TO BE FED

CUSTOMARILY, an actual or a prospective increase in population is looked upon as a circumstance calling for mutual congratulation among those who measure food markets by the simple mathematical process of multiplying known or anticipated per capita consumption in a given economy by the number of mouths to be fed. But, at the risk of seeming to conjure up gloom in what ought to be only a happy season, it is pertinent to indicate that there are some who see another, and a less glittering, side of this coin.

E. B. Weiss, a writer for Advertising Age, looks sternly at this other side of the coin. He recognizes in rapid growth of our population one of the most persuasive reasons for anticipating a brilliant economic future, but suggests that the stimulating effect of this powerful factor may sometimes be exaggerated. He quotes a cautious banker who puts the matter this way:

"Our population is now increasing at a rate of about 2,812,000 a year. While that statistic is relatively dull, it is stimulating to consider that next week and every week thereafter until 1965 there will be 54,000 new customers for American industry. To express it another way, some observers state that it is as though we added another Jacksonville, Fla., or Richmond, Va., every month, or another Pittsburgh or Milwaukee every three months.

"Now that does sound exciting. If we were to add such a city with its large working population, its mills and factories, it would be a tremendously stimulating influence on the economy, for it would add to our already high rate of production, and production is the key to economic well-being.

"But we aren't adding a Pittsburgh or Milwaukee every three months. What we are adding is thousands of babies. Automation is progressing rapidly, but the principal cause of population increase is still through an old-fashioned method which results in a final product which is an utterly dependent consuming but non-producing baby.

"Adding 2,800,000 babies to the population does not aid the economy—it depresses it, for its immediate effect is to reduce the standard of living.

"You may recall from your college economics courses, the story of the early communal experiments in this country, several of which failed for the simple reason, that, relieved of individual responsibility as parents for feeding their children, couples produced at a high rate, and the community found itself with such a large number of non-productive children that it could not adequately feed, clothe and house them.

"The working population (20 to 64 years of age) is expected to increase by only 10,000,000 as compared with an increase of about one and a half times that amount, 14,000,000 in the other age groups. In other words, 60% of the expected increase will occur in the 'dependent' age classes—older, retired, and the infant groups. We face the possibility that the proportion in the dependent age group may not necessarily always be a buoyant factor."

## This Month . . .

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## The American Baker



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FRANK W. COOLEY, JR.  
Editor

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**BAKERY ENGINEERS OFFICERS**—The 1958-59 officers of the American Society of Bakery Engineers, which this month concluded its 34th annual meeting in Chicago, are shown above. In the front row, left to right, are: H. Alvin Meyer, Grocers Baking Co., Lexington, Ky., first vice president; Andreas F. Reising, Sunrise Bakery, Inc.,

New Orleans, La., president, and Clifton R. Scarborough, Scarborough Industrial Foods Co., Charlotte, N.C., second vice president. In the back row are Victor E. Marx, secretary-treasurer of the organization, and Clayton C. Daley, Alfred Nickles Bakery, Navarre, Ohio, elected third vice president of the bakery engineers.

## New Developments and Refinements of Technology Hold Attention of 1,900 at 34th ASBE Meeting

CHICAGO—A registered 1,869 bakery engineers and members of their allied trades gathered here March 3-6 for the 34th annual meeting of the American Society of Bakery Engineers. Receiving first attention were problems and new developments in the science of bread manufacture, with other baking departments also coming in for their share of technical discussion.

During the initial phases of the morning program March 3, William E. Maier, Maier's Bakery, Reading, Pa., led the group in singing with the assistance of Melvin Boles, Maple Leaf Milling Co., Toronto, filling in for John Wardlaw of the Borden Co., who was unable to be present.

Another substitution found Merrill O. Maughan of the Bakery Packaging Council, delivering the invocation instead of Gordon Darnell, Los Angeles, a past president and long-time member of the engineers, who did not attend following the recent death of Mrs. Darnell.

"No one should leave here empty-handed," Harold M. Freund, Freund Baking Co., St. Louis, retiring ASBE president, said in describing the 1958 ASBE program as a "down to earth practical program." During his report to the membership, the engineers' president brought the ASBE up to date on the recent activities of the society.

### Assistant Introduced

Victor E. Marx, Chicago, ASBE secretary, reported another gain in membership, the growth of the 25-year classification until it now represents 7% of the society's membership, and his trip to England and the continent last year, followed by his serious illness. To act as assistant to Mr. Marx, the society was introduced to Bernard Bergholz, Jr., who joined ASBE two months ago.

A traditional part of the first session of the year is the appearance of representatives from the other major

baking industry trade organizations. Charles J. Schupp, Schupp's Pastry Shop, Washington, D.C., president of the Associated Retail Bakers of America, represented that group, while E. E. Kelley, Jr., Butter-Krust Bakeries, Inc., Lakeland, Fla., spoke for the American Bakers Assn., as its president.

Mr. Schupp called attention to the fact that National Retail Bakers Week is presently in progress, and lauded the breakfast program of ABA as another step in merchandising the baked foods produced by members of ASBE. "To do your very best you must first of all be enthusiastic about your job and your industry," Mr. Schupp summarized. "Ability is only part of the game—it's the little extra effort required to set oneself above the crowd that makes the difference between a minor league ball player and a major league one, or the difference between a minor industry and a major one."

The primary jobs of the bakery production men are to produce a

quality product at a price the consumer will pay, Mr. Kelley emphasized. He said this is being done but merchandising is still behind production.

"Quality and efficiency are the goals you are meeting," Mr. Kelley said. "Our two yardsticks are consumer acceptance and adequate nutrition. Unless we can convince the consumer that our products do something for her we have not succeeded," Mr. Kelley said.

Mr. Kelley referred to a survey which proves that U.S. bread is superior nutritionally to bread from 13 other countries—and is also higher than "grandmother's bread" in all aspects of quality and nutritive value.

"The bakery engineers are accomplishing their first purpose of producing bread of high quality," Mr. Kelley said. "We have the finest bread, when made with 4% non-fat milk solids, that the world has ever known."

The engineers' second responsibility, to produce efficiently enough so that everyone can buy bread, is also be-

ing admirably fulfilled, Mr. Kelley noted. Using as a basis for his calculations the minutes of labor needed to buy a pound of bread, Mr. Kelley said: "Your bread is selling today for one third less than it did during the depression years." In the 1935-39 period, 8.3—that is eight and three

### ASBE COVERAGE

Editorial and photographic coverage of the 34th annual meeting of the American Society of Bakery Engineers, held in Chicago March 3-6, was handled by the following members of The Northwestern Miller staff: Frank W. Cooley, Minneapolis, Henry S. French and Don E. Rogers, Chicago.

tenths minutes labor were required to buy a pound of bread. In 1956 only five and one half minutes were needed.

### Statistics Given

According to this logical yardstick of buying power, the Russian today must work 14 minutes for his bread, the French 9, the German 12, the Norwegian or Swiss 7 minutes. "So we have the finest bread at the lowest cost," Mr. Kelley reported. He went on to say there is "one area where we have failed—we haven't convinced the consumer that bread is her best food buy." Mr. Kelley reported another survey which put bread third behind milk and meat, in not only the category of number one food buy, but also in the freshness and quality aspect. Women want to know more about nutrition, and it is up to the sales and merchandising forces of the baking industry to convince them of bread's nutritive quality, he said.

"Changing the attitude of the housewife toward bread is our big challenge," Mr. Kelley concluded. "You have given us the story we must

## ASBE ELECTS NEW OFFICERS, ALTERS BYLAWS TO PERMIT RETIRED MEMBER CLASSIFICATION

CHICAGO—Andreas F. Reising, Sunrise Bakery, Inc., New Orleans, was elected president of the American Society of Bakery Engineers during the first business session of the annual ASBE meeting here. Mr. Reising was first vice president. As president, he succeeds Harold M. Freund, Freund Baking Co., St. Louis. Clifton R. Scarborough, Scarborough Industrial Food Brokerage Co., Charlotte, N.C., was elected second vice president, following his duties during the current year as program chairman. H. Alvin Meyer, Grocers Baking Co., Lexington, Ky., was elected first vice president. Clayton Daley, Alfred Nickles Baking Co., Navarre, Ohio, was elected third vice president. Victor E. Marx, Chicago, continues as secretary-treasurer. Upon recommendation of the executive committee at the same business session, the membership unanimously approved a change in the ASBE constitution and bylaws permitting the approval of a retired member classification without dues. The change, as entered in the constitution, reads: "Retired members shall be those members who have been active members continuously for at least 15 years, who have attained the age of 60 years, and who have retired from the baking and/or allied business and who apply annually for such status. Retired members shall not be required to pay dues."

tell, and someday we will be able to convince the housewife that 'Enriched Bread Enriches Health'—and do it on a much smaller promotional budget than the milk or meat people."

Gov. Frank G. Clement of Tennessee delivered the society's traditional inspirational address, after being introduced by F. B. Evers, American Bread Co., Nashville. Speaking primarily on the integration problem, Gov. Clement remarked that "bigotry has no boundaries," and emphasized that in his opinion the "lowest echelon of government possible" should be permitted to solve such problems.

## Chemistry of Major Baking Ingredients

The afternoon session was devoted to discussions on the chemistry of bread production and the practical use of flour laboratory reports, with additional information on the bulk handling of liquid bakery ingredients. Oran J. Laymon, Bowie Pies, Los Angeles, Cal., was session chairman, and Arthur G. Hackett, Drake Bakeries, Inc., New York, past president of the society, Monday afternoon meeting chairman.

George T. Carlin, Swift & Co., Chicago, discussed the multiple chemical and biochemical reactions within bread doughs in his paper "The Fundamental Chemistry of Bread Making" based on recent laboratory experimentation of Mr. Carlin and his staff. Bacteriological aspects of finished bread were also examined, and color slides used to show gluten development in bread doughs, from dough samples magnified 200 times. He showed the dispersal of gluten by high speed mixing, the effect of undermixing, and demonstrated that gluten is proved a tough, stable material by remixing after substantial (35 minute) overmixing. Gluten is considerably tougher than bakers have been led to believe, Mr. Carlin said.

Research also disclosed that yeast does not multiply in the dough, as proved by biological laboratory count. Thus it is not possible to save yeast by a longer fermentation time, Mr. Carlin claimed. The laboratory analyses showed eight separate strains of



**WILL PLAN ASBE PROGRAM**—In charge of the 1959 program of the American Society of Bakery Engineers, which will observe its 35th annual meeting in Chicago next year, are the program chairman and his assistant. Left to right above are Lewis P. McAdams, Food Industries Co., Dallas, Texas, and his assistant, Irwin O. Rohrbach, Standard Brands, Inc., New York. (In the background is Don F. Copell, Wagner Baking Co., Newark, N.J., a past president of the society.)

lactic acid bacteria, Mr. Carlin said, with an additional four strains of heat resistant lactic acid bacteria, and other bacterial types present in the dough and the yeast. Glen E. Findley, Burrus Mills, Inc., Dallas, Texas, in his evaluation of the various factors generally included in flour laboratory reports, told of a survey he conducted, with the answers disclosing bakers preferences in laboratory reports. These reports are an aid in the production of uniform quality products, Mr. Findley's informants agreed, since accurate reports enable in-plant adjustments of a dough to meet specific requirements or solve a particular problem. Mr. Findley feels the baker is entitled to a clean white flour of proper baking quality and uniformity, but he does not feel the baker is entitled to a flour exactly uniform in ash and protein year after year, because of crop variations.

The survey of bakery production men showed that in bakers opinions the mixing time would be one of the most valuable indications on a laboratory report, as well as fermentation

tolerance. The flour and water mixing graphs are not as important to the industry as they once were, it was felt.

The optimum pH for bread doughs ranges from 5.3 to 5.45 on average milk, but Mr. Findley felt that the pH could be varied by increasing or decreasing machining. The bulk storage and transport of various bakery materials are becoming more and more important as labor and material costs rise, according to Earl G. Spangler, Liquimatic Systems, Los Angeles. In addition to higher costs making bulk consideration necessary, Mr. Spangler is of the opinion that "skilled engineers are moving into areas where the old way of doing things was sacred—particularly in the food industry."

Storage problems to be faced, Mr. Spangler said, include the inability of most baking plants to expand their storage areas regardless of product sales growth, and the distances from storage to mixing areas. New installations for handling liquid lard and shortening are gradually eliminating disadvantages, he said, paving the

way for complete automation in this department.

Engineering and economics of the other major ingredient to be transported in liquid state—liquid sweeteners—were a continuation of the bulk handling methods detailed by Mr. Spangler. Ben Borden, Hart's Bakery, Memphis, Tenn., reviewed the progress made in handling liquid sugars in the automated bakery. High converted corn syrups are best for all around bakery use, he felt, although sucrose is also available and there is one type being used which contains dextrose—this latter mixture because of the tendency of dextrose to crystallize required a blend of 50% sucrose and 50% dextrose within a 70% blend—which would be 70% solids and 30% water.

In the evening the social event of the week, the engineers dinner, was held in the Polynesian room of the Edgewater Beach Hotel, with T. E. Lauder, Ekco Engineering Co., Chicago, in charge.

## Classification of Flour by Air; Bread Production

Spotlighted for the engineers at the annual meeting of the American Society of Bakery Engineers, in addition to procedures for efficient quality production of baked foods, was a report on the processing of wheat flours by air-classification techniques.

Appearing during the second day of the meeting at the Edgewater Beach Hotel here, Frank W. Wichser, Pillsbury Mills, Inc., Minneapolis, described and illustrated new techniques in milling used by his firm under the name of "turbo-milling."

This important new subject received considerable attention from the audience as Mr. Wichser described several particle size fraction types, each having a different baking performance characteristic.

Mr. Wichser indicated that "flour is not a powder milled from a homogeneous endosperm, as was thought previously." It is this variation within the endosperm which permits different fractions of the flour containing different baking characteristics.

Mr. Wichser pointed out that the preparation of wheat for milling calls for tempering so a differential toughness exists between the bran and the endosperm. In the roller mill, the opposing roll moving at approximately 2½ times the speed of the holding roll does not actually grind the wheat berry but applies a shock action or impact. One of the prime reasons why baking characteristics change from year to year, in Mr. Wichser's opinion, is that the percentages of fine and coarse material within the endosperm vary each crop year.

The conventional milling technique produces particles of sizes throughout the range. The type of air-classification now being used allows fractionating in the finer ranges and allows a flour to be tailored by removing the material which is not needed. This fractionating by air takes place after the conventional milling process has produced a standard type of flour.

For instance, the speaker pointed out that Kansas hard winter wheat, commonly used for bread baking alone, contains 30% of low protein starchy material, usually part of cake flour and used for cake making.

The process may also help the miller and baker by upgrading the ma-



**SWEET GOODS, GADGETS**—Shown above are several of the speakers during the ASBE session on mechanized production of sweet goods, which also included a slide presentation on gadgets developed by bakery engineers. Left to right are Claude A. Miranda, Ward Baking Co., LaGrange Park, Ill.; David E. Downs, Krispy Kreme Dough-

nut Corp., Winston-Salem, N.C., and Irwin O. Rohrbach, Standard Brands, Inc., New York, session chairman. In the background is Ray Thelen, Pillsbury Mills, Inc., Minneapolis, meeting chairman. The other illustration shows LeConie Stiles, Jr., Ruth Ashbrook Bakery, Seattle, speaking on the mechanized production of coffee cakes.



terial when larger particles are removed from a cake flour by air classification, Mr. Wichser said.

#### Particles and Classification

Mr. Wichser showed that the parent flour by air classification can produce varying percentages of protein and endosperm chunk particles. For instance, a soft wheat will contain

20% of very fine high protein, 60% of fine low protein, and 20% of endosperm chunk particles. The hard wheat will contain 15% of very fine high protein, 25% of fine low protein, and 60% of endosperm chunk particles.

From a hard winter wheat bread flour, in which the parent flour contains 11.7 protein and 0.43 ash, air

classification will produce any number of classifications, but three or four fractions are generally sufficient. In his example, four fractions were used: The high protein fraction had 20% protein and 0.44 ash, the endosperm chunk contained 11.5 protein and 0.41 ash; the flour suitable for cookie and cracker production was 7.0 protein and 0.44 ash while the cake flour con-

tained 6.0 protein and 0.33 ash. For cake use it is best if the starch particles are void of protein, Mr. Wichser said.

A series of slides was shown which illustrated the quality of baked products available from the hard winter wheat flour under five particle size classifications: 1. the parent bread flour, 2. fines low protein, 3. chunk



**ASBE SESSIONS**—One of the best attended sessions during the recent annual meeting of the American Society of Bakery Engineers was the morning session March 4, which featured papers on air classification of flour and bread and roll production. The illustration at the left above shows three of the speakers: Albert E. Tolley, Gottfried Baking Co., New York; Melburn B. Hancock, Union Machinery Co., Richmond, Va., and Robert G. Dibble, Interstate Bakeries, Inc., Kansas City. The picture at the right shows the session

chairman, William C. Kollman, Continental Baking Co., Rye, N.Y., later elected a member of the ASBE executive committee; (in the background is Andreas Reising, Sunrise Bakery, New Orleans, meeting chairman); Lee J. Pergiel, American Stores Co., Wilkes-Barre, Pa.; Frank W. Wichser, Pillsbury Mills, Inc., Minneapolis, and Douglas Williams, Consolidated Bakeries, Toronto, who read the paper of Adam H. Bradbury, baking consultant of Toronto, Ont., absent because of illness.



**MAJOR INGREDIENTS RESEARCH**—Discussions of research projects concerned with major baking ingredients such as flour, bulk shortening and bulk sweeteners were featured during the afternoon session March 3 of the American Society of Bakery Engineers annual meeting. The illustration at the left above shows Ben Borden, Harts Bakery, Memphis, Tenn., and Earl G. Span-

gler, Liquimatic Systems, Los Angeles, who discussed shortenings and sweeteners. At the right, Glen E. Findley, Burrus Mills, Inc., Dallas, discussed laboratory reports, Oran J. Laymon, Bowie Pies, Inc., Los Angeles, acted as session chairman, and George T. Carlin, Swift & Co., Chicago, reported on research into the "fundamental chemistry of bread making."



**PIE PERIOD**—A discussion period on wholesale pie production was a feature of the afternoon session March 6 during the American Society of Bakery Engineers meeting in Chicago. The group shown in the illustration at the left above handled the various subjects—left to right they are Jess G. McGhee, Wagner Baking Corp., Chicago, who shared the pie portion of the panel with

A. Carl Aller, Hibiscus Baking Co., Miami, Fla. Next is Harry D. Gardner, Union Steel Products Co., Albion, Mich., session chairman, and Nat H. Nash, American Bredco Corp., New York. The illustration at the right shows a portion of the visitors at the baked foods display of the society—at the left is Bernard Bergholz, Jr., recently appointed assistant secretary of the ASBE.



**ASBE SCENES**—During opening ceremonies for the 34th annual meeting of the American Society of Bakery Engineers at the Edgewater Beach Hotel March 3-6, the plaque awarded Victor E. Marx, ASBE secretary, by the British affiliate chapter, was shown to the audience by Arthur G. Hackett, Drake Bakeries, Inc., New York. Left to right are Mr. Hackett, Mr. Marx, Gov.

Frank G. Clement, governor of Tennessee and inspirational speaker, F. B. Evers, American Bread Co., Nashville, who introduced Gov. Clement, and Harold M. Freund, Freund Baking Co., St. Louis, president of the society. The illustration at the right shows Clayton Daley, Alfred Nickles Bakery, Navarre, Ohio, newly-elected third vice president.

endosperm, 4. intermediate fines low protein-starchy, and 5. fines low protein-starchy. In showing the products ranging from bread to cookies made with these five fractions, Mr. Wichser pointed out that it is the particle size that is important in cake flour, and the protein level can be manipulated after the particle size is decided upon.

"It is believed that the baker will see many more air classified flours," Mr. Wichser said. "The vagaries of weather can be minimized and greater uniformity supplied. Greater flexibility is also available, particularly in foreign countries where hard winters cannot be grown."

#### No Cost Boost Expected

In response to various questions from the audience, Mr. Wichser pointed out that soon the baker will be getting superior flours at no additional cost and that better flavor results, according to flavor tests by people using the flour. It is felt that the flour will be generally available soon, and that most major milling companies will be supplying air classified flours. No differences in mixing, fermentation or absorption were noticed, except that the absorption is changed slightly for the better by removal of the low protein fractions.

A discussion of the effect of normal ingredients on white bread production, and the importance of the equipment in the control of quality was described by Robert G. Dibble, Interstate Baking Co., Kansas City, Mo., as some of the factors affecting the character of white bread. Reviewing the desirable attributes of the soft white bread that is still the best selling loaf in the country, Mr. Dibble reported that "salesmen say it must be fresh and soft, wrapped neatly and sealed well, fine in grain and free of holes with good flavor to eat right without being soggy or dry, retain its freshness and flavor and be uniform from day to day." Admitting that this was quite an order, Mr. Dibble reported the methods used in his bakeries to produce such a product and gave his opinions of the effect each ingredient had upon the bread.

Warm flour was thought to produce better bread than a cold flour with better absorption. Mr. Dibble recommended storing the flour for 10 days so that the flour will go to the mixer at approximately 75°. He did not believe that water was any particular problem, since most water is 8 to 8.5 pH and that analyses of water characteristics were available from the U.S. Department of the Interior, local departments of agriculture, water departments and the like.

If the pH of water gets above 9 or 9.5, then allowances might have to be made.

A high sugar content makes the crust tender and hard to handle under mechanized conditions, Mr. Dibble said. He urged the bakers to use as much salt as possible, with 2½% on flour weight about right, since too much makes the bread firm in the market.

Milk is now uniformly good, Mr. Dibble feels, and various levels can be used safely, although to go beyond 4 to 5% makes a uniform product difficult. The use of milk should be carefully balanced with the sugar content of the bread. Shortening in the 3-5% range is used to make bread tender. The use of lard, particularly in machine production, works best because lard is a better lubricant, although emulsified vegetable shortening "comes close."

Mr. Dibble also made the following observations about the supplementary ingredients in bread production:

Over-malted flour will cause the grain to open up.

Fungal enzymes allow a reduction in mixing time.

The miller is equipped to properly blend flour—the baker is not.

The baker must watch his cleanup time in order to check absorption, control and correct mixing.

(Mr. Dibble showed several slides and instrument curves showing how such a chart could help the baker control mixing time and absorption.)

The use of plastic coatings on the rolls of make-up equipment will cut down on the use of dusting flour and result in fewer streaks in the finished bread.

The proof box temperature is best when kept in the middle 90 degrees.

The factors affecting flavor of white bread were scheduled to be discussed by Adam H. Bradbury, consultant of Toronto, Ont., but Mr. Bradbury was too ill to appear on the program and his paper was read by D. S. Williams, packaging and technical director of the Consolidated Bakeries of Canada, Ltd., Toronto.

"White bread does not have the flavor and eating quality it should—and the housewife realizes it," Mr. Bradbury's paper disclosed. He urged that the baker do less advertising about a product's soft silky texture and do more work on flavor and eating quality to encourage wider consumption.

#### Poor Fermentation Cited

In Mr. Bradbury's opinion, the lack of flavor and eating quality in present-day white bread is not because of

any lack in the ingredients but merely poor sponge fermentation. For that reason, Mr. Bradbury felt that better fermentation is the No. 1 factor in good eating quality, and suggested that the bakery engineers "check with the brewmaster" for pointers on proper fermentation.

In Mr. Bradbury's opinion, difficulties in fermentation have been with the baking industry ever since combining of wheat started many years ago. At that time, when flour made of combined wheat began appearing in the bakery, the standard fermentation procedures produced a bread of poor quality. This development was later defeated by a mechanical means, but Mr. Bradbury feels that the whole trouble was not machining, it was fermentation because grain harvested by combine was not able to develop naturally the necessary fungal enzymes. The problem should have been overcome by adding fungal enzymes to the mix rather than by changes in machine practice. If properly used, Mr. Bradbury is sure the fungal enzymes provide more perfect fermentation, thus improving eating quality. Longer fermentation time is not the answer since yeast alone cannot do everything to improve the quality of the mix; yeast food and fungal enzymes are necessary.

The use of these ingredients means that a large amount of mechanical development on the remix is not necessary.

"Correct fermentation has become a lost art because bakers are depending upon mechanical equipment to do what it was not meant to do," Mr. Bradbury's paper said. He hopes that flavor and eating quality will now begin to receive the same attention that texture and crust color receive.

## Work Habits, Communication, Safety Discussed

Following the traditional early birds' breakfast the Wednesday morning program on employee relationships and work simplification got under way with Ned W. Bost, Bost's Bakery, Shelby, N.C., as session chairman; he was introduced by Ray Thelan, Pillsbury Mills, Inc., Minneapolis, meeting chairman. Program chairman Clifton R. Scarborough had arranged the series of papers intended to help bakers eliminate waste, time and money by creating a more efficient climate. Frank A. Busse, with the Quality Bakers of America

Co-operative, Inc., Maplewood, N.J., talked about the "hidden cost" which can be alleviated by work simplification. Actually, the word "hidden" is contributing to confusion on this subject, Mr. Busse feels, because "hidden" means "out of sight or secret"; he feels "unseen" or "unlooked for" is a more accurate description.

An important part of the work simplification changes is the answer to the question: Why do we do what we do? Most important is the capacity to handle human relations. All difficulties such as Mr. Busse described are made up of technical and human difficulties—and the latter is the one which causes trouble. "It is human nature to resist change and to resent criticism—sure, I'm in a rut but I dug it, it's mine and I like it that way," Mr. Busse illustrated.

In closing, Mr. Busse said that the bakery management team was not motivated to produce or to reduce costs, neither end would be gained. "Don't mistake activity for accomplishment."

Better employee relationships through human relations and greater efficiency through understanding was the subject of an address by Dr. Robert N. McMurry, McMurry, Hamstra & Company, Chicago. Good communications within a plant are vital, Dr. McMurry said. Communications should move in a downward direction to answer the why, communicate necessary and important company policies, procedures, operating instructions, etc., and of course also in an upward direction with problems and grievances.

Saying that there are several tendencies toward misunderstanding and compartmentalization in most operational set-ups, Dr. McMurry listed six primary barriers to downward communication:

1. The tendency for each position in the transmission of a message to alter it somewhat.
2. The failure of these people to remember what they want.
3. Mechanical failure of the communication—the receiver just doesn't get the message.
4. Management communication is suspect because of a past history of "double talk," or labor representatives have taken the place of management in this type of communication.
5. Employees may have greater faith in other means of communication, such as the "grapevine," or more confidence in what they hear



from unions rather than from management.

6. Superintendents and foremen may themselves be barriers between management and the worker.

The opposites of these situations form the chief barriers in an upward direction, and in addition there are such circumstances as the "sunflower effect," where no one wants to point out shortcomings in an official or where people are more interested in pleasing their immediate boss than in the welfare of the men under them. Others are the inaccessibility of a superior, situations in which management refuses to believe, the tendency of a message to be distorted in transmission, the distrust of supervisors by their subordinates. All of these can be reversed through better communications. For instance:

- All instructions must be phrased in simple, understandable language.
- It must be recognized that the chain of management control must be supplemented with instruction sheets, manuals and policy statements so that all difficult or trouble-prone situations will be done on paper.
- All communications must be two-way and checked for comprehension, even to the extent of receiving a "feed-back" from the man being instructed.

The end goals of this procedure are a mutual understanding of each other's problems which results in a pay-off at the cash register, in fewer mistakes, and in better employee morale, Dr. McMurtry concluded.

#### The Importance of Safety

The extreme importance of continued and greater emphasis in the baking industry on safety was stressed by Frank J. Wirken, Interstate Bakeries, Inc., Kansas City, who pointed out that the national average of lost time accidents is 6.38% with baking quite high with 10.38.

"This is a most vital subject—safety means life," Mr. Wirken said. He stressed that management should think of others and identify their interests with others.

"You must install machinery with such fool-proof protection that accidents cannot cause your co-workers physical discomfort or the plant lost production. Management has a definite responsibility to make its plant a safe place to work. The American Standards Association's Z-50 Committee, including members from the American Society of Bakery Engineers, has not been used as much as it should be by the baking industry and many do not know it exists."

"You are the first to create a safety climate—when a new machine is installed or an old one revamped be sure and get the safety engineer in on it and of course the operator—so they will both see the machine operates differently than it possibly did the day before.

"Safety is a continuing process and for success must have:

"The complete endorsement of top management.

"The program must include supervisors who help plan the program.

"Top management is charged with in-plant supervision.

"The safety program must be a moving and continuous thing to create the proper attitude and to keep the entire work force on the alert.

Automatic dough weight scaling was discussed by John A. Abbott, Food Machinery & Chemical Corp., San Jose, Cal., who reported on his

close association with experimental work on dough scaling weight problems. In Mr. Abbott's opinion, it is very difficult to scale bread dough to the correct weight even with modern equipment. To evaluate the economic importance to the baker of better weight control, Mr. Abbott suggested that the industry should study the technical aspects of the weight scaling problem, a method for continuous automatic divider control, explain the results of experimental work done and show how laws vary in writing and in interpretation and in enforcement.

"The baker must scale above weight to be sure he isn't short and thus in violation of the law," Mr. Abbott said, "I have found that 2% of bakers over-scale one-half ounce per loaf in addition to the normal allowance for bakeout loss. If \$1,800,000,000 worth of bread are purchased every year, that makes \$600 million worth of dough so that the baker is giving away \$10 million every year in overweight."

For an average plant producing 100,000 lb. of bread per week with an ingredient cost of 6¢ lb. Mr. Abbott showed that the loss was \$136 a week or \$7,072 per year. He also observed that the cost of ingredients is more than twice the direct labor cost.

## Mechanized Production of Sweet Goods

A miscellaneous program was planned for the afternoon session March 5 including mechanizing of coffee cake and sweet goods production, mechanization in doughnuts and a gadget review. First on the program was LeConie Stiles, Jr., Ruth Ashbrook Bakery, Seattle, Wash., who discussed the benefits of mechanization and automation in producing products of uniform quality. Stressing quality throughout his paper, Mr. Stiles mentioned that sweet goods can be the baking industry's strongest weapon because of their glamour and appetite appeal. He urged the bakery concentrate on better quality, more variety, and finer packaging without pricing itself out of the market, and explained that the solution to production under these qualifications is modernization. He also suggested that the dollars saved by production improvements should be plowed back into making superior products.

A restriction of variety is bad for sweet goods bakers in Mr. Stiles opinion. It must not be a make-work type item, but the production of sweet yeast-raised goods should carry its full share of the overhead. He suggested that 1/3 to 2/3 of the dough weight should be filling, and said that a variety of fillings makes it easy for the baker to increase his over-all variety, but he pointed out that fillings and toppings will not cover up poor quality doughs and suggested that both the dough and the filling or topping should be in harmony.

"Do not bake to a price," Mr. Stiles said. "Bake your best quality and then adjust the size of the product to the price you must hit."

He suggested that flavors should be made "tantalizing" and tested by the baker 24 or 48 hours after baking, because that is when the consumer makes her taste test. He suggested that strong flavors have no



**AWARDS**—The traditional awards given by the American Society of Bakery Engineers to retiring officers of the organization are shown in the illustrations above, taken during the presentation ceremonies. At the left, M. J. Swortwagner, American Dry Milk Institute, Inc., Chicago, presents the Society's clock to Harold M. Freund, Freund Baking Co., St. Louis, Mo., retiring president of the ASBE. In the illustration at the right, Arthur G. Hackett, Drake Bakeries, Inc., New York, a past president of the society, presents a desk pen set to Ray Thelen, retiring second vice president of the ASBE. Mr. Thelen, Pillsbury Mills, Inc., Minneapolis, was program chairman during Mr. Hackett's presidency.

place in sweet goods because strong flavors will make the customer tire of the product.

"Ours is an industry problem, not an internal competitive problem," Mr. Stiles said. "Quality or the lack of it is easily discernible by every customer."

The changing trends and increased mechanization notable in the production of doughnuts and other fried foods were discussed by David E. Downs, Krispy Kreme Doughnut Corp., Winston Salem, N.C. Mr. Downs appeared on the program six years ago, great strides have been made in mechanizing the production of fried foods, Mr. Downs said, "and I will have to contradict some of the claims I made at that time."

Mr. Downs also pointed out that consumption has increased with the advent of mechanization in this type of production.

Mr. Downs illustrated the benefits of mechanization in both the pressure extruded and the cut varieties of doughnuts and pointed out that the doughnut mix is quite popular. He emphasized that the mix must be formulated for the type of installation the baker has.

Conveyor coolers are being used a good deal because of reduced labor costs and better control over cooling and packaging. He stressed that shortening and flavor lines are geographical and that 30-50 varieties are now being made available because of different toppings. This is a happy circumstance for the baking industry because doughnuts are an impulse item. Mr. Downs also talked about the new "honeybun" which appeared two or three years ago and is becoming quite popular. It is a fried product, looks somewhat similar to a cinnamon roll with a coating usually of honey from which the name is derived, but also can have a sugar base.

The afternoon session was concluded with a gadget review conducted by Claude A. Miranda, Ward Baking Co., La Grange Park, Ill., to demonstrate that bakers are resourceful in making things for themselves. Mr. Miranda showed a collection of gadgets from many bakeries on slides, used to simplify production problems.

The traditional bull session was held that evening, presided over by J. S. Devanny, International Milling Co., Lincoln, Ill., and Duncan D. Anderson, F. N. Calderwood, Inc., Portland, Maine. The program participants of the first three days were invited to be present to continue discussion and answer questions relating to their special subjects. The session was well attended.

## Effect of pH, Emulsifiers on Cake Batters

The final day of the 34th annual meeting of the American Society of Bakery Engineers found the morning session devoted to technical discussions on physical properties of cakes and cookies, cake batters and continuous mixing.

Data showing the effect of pH on flavor, color and the physical properties of cakes and cookies was presented by Dr. Charles A. Glabau, Bakers Weekly magazine, New York, who showed how the senses react to aroma and flavor in test panels on cakes.

He also showed the effect of pH content on several varieties of cakes and cookies where the only change was made in the pH content. The research was conducted to show changes in diameter, thickness, volume, color reading and tenderness or breaking point to show that pH content can seriously affect flavor and color by having it in the wrong position.

For instance, the white cake should always be on the acid side of the pH average 7, since if it is higher than that the grain will show a darker crumb and there will be a browning reaction. Chocolate cake gets its best color on the alkaline side, and angel food could change its physical structure by going from the acid to the alkaline side during the testing experiments.

The use of emulsifiers and inverts in cake batters and butter creams was described by Henry H. Favor of the R. T. Vanderbilt Co., Inc., New

(Turn to ASBE, page 46)

## Flour Market

# Flour Buying Slow, New Crop Prospects Encourage Cautious Trading Attitudes

By K. W. WAKERSHAUSER  
American Baker Staff

The 30-day period which closed March 10 was marked by cautious, limited flour buying on the part of large independent and chain bakeries, principally to extend old contracts comfortably into the period when new crop flour and wheat will be available. Buying occurred the first week in February, totaling approximately 200,000 sacks, and again the second week for a similar amount, and again near the close March 6 and 7. The initial February round of buying was almost wholly hard winter wheat types. The mid-February spurt was spring wheat flours, while the final purchase again centered on Southwest types, with a small amount of spring wheat flour also passing.

In almost all cases, extensions to contracts were encouraged by a desire to accumulate adequate supplies in the face of a tightness of old crop wheat supplies, and the accompanying possibility of higher prices between now and June 30. However, in contrast with this, bakers found the mills, almost without exception, willing to dispose of old crop flour at favorable prices. The final round of hard winter wheat flour sales was carried through, in fact, at levels which were just about at the crop year low.

With flour buying at low ebb, two major market factors came into sharp focus during the month to dominate trade thinking. Both give indications of exerting strong influence on pricing and buying trends for at least the remainder of the old crop year.

The first is the 1957 "free" wheat supply remaining between now and June 30. Reliable trade sources, including the Agricultural Marketing Service, estimate total requirements for the remainder of the crop year at 465 million bushels against an available supply of 415 million bushels. This would leave a free wheat shortage of 50 million bushels and, of course, the likelihood of stronger

wheat and flour prices through June 30. It is well for bakers, however, to consider their immediate needs in the light of certain modifications of the free wheat situation now taking place.

For one thing, a good portion of the wheat/wheat flour export requirements included in the AMS estimate involves fulfillment dates which may be met later in the summer from new crop supplies, lessening the pressure on current supplies. For another, there is the possibility of an early harvest in the Southwest, relieving pressure on free market supplies, although this is, of course, subject to vagaries of the weather. Substantial wheat stocks held by the government cannot be counted upon to materially relieve the tight supply situation without the impetus of higher free market wheat prices, and the accompanying rise in flour quotations.

## Production Outlook For 1958 Crop

The latest available U.S. Department of Agriculture production estimate for the 1958 wheat crop is 1.15 billion bushels, including prospective spring wheat plantings. This compares with the 1957 total harvest of 947,102,000 bu. and the 1956 harvest of 1,004,272,000 bu. If harvested, it would make the 1958 wheat crop the fourth largest of record, but still short of the 1947 all-time high of 1,358,911,000 bu. Such a crop, obviously, is making flour buyers hesitant about extending their contracts on 1957 wheat and flour so far ahead that they would be unable to take advantage of the bearish market picture inherent in the 1958 production outlook. Breaking down the USDA production estimates, the 1.15-billion-bushel total forecasts winter wheat at 906 million bushels, or 28% above 1957, and spring wheat at 244 million bushels, compared with 239.9 million bushels in 1957. Herein lies the reason for the careful, short-term

buying which has characterized the flour markets during February and early March.

## Flour Prices Fluctuate

Nominal flour prices climbed steadily throughout most of February, apparently under the influence of firm old crop wheat prices, a fairly stable level of mill production, and the widespread reports of tighter old crop supplies in the months just ahead. But there was an undertone of softness, evidenced by the attractive levels at which limited flour purchases were made. This tendency toward weakness came into prominence early in March as bakers filled their immediate needs, somewhat nullifying the possibility of large purchases before new crop time. Prices began to come more under the influence of new crop forces, with accompanying softness. By March 10 most February price gains had been wiped out. Nominal flour quotations at Minneapolis were being quoted 11¢ below early February. Hard winter wheat flour prices at Kansas City were being quoted nominally 13¢ below a month earlier. The only increase appeared to be in soft wheat prices which were being quoted at Chicago 5¢ above the comparable date the previous month.

## "Breads of All Nations" Theme Of Michigan Bakers Conference

EAST LANSING, MICH.—"Bread of all Nations" was the theme for the sixth annual Michigan Bakers conference at Michigan State University this year. The conference display committee utilized a map of the world as the setting for the loaves of bread from all nations.

The most common foreign breads were Vienna and French breads, with Danish rye, pumpernickel and some others running a close second.

"We were glad to have local residents come and see the displays because housewives generally have little conception that so many foreign breads are marketed in Michigan," declared George Bedell, of MSU. Mr. Bedell is a member of the faculty of the MSU school for hotel, restaurant and institutional management, which the conference sponsors, in cooperation with the bakery and trade organizations.

### Breads Offer Variety

"Housewives can add variety to their meals by trying some of these foreign breads," commented Mr. Bedell.

An estimated 100 retail and wholesale bakers brought their prized breads, cakes, pies, cookies and other specialties for the big display.

Demonstrations are an annual feature of the Michigan Bakers continuing education conference. This year Leo Fairbanks, Fairbanks Bakery, Grand Rapids, showed how to simpli-

## Cash Wheat Prices Firm

The real strength of old crop wheat, and evidence of existing tightness, appeared in cash wheat prices which staged gains throughout February and early March. Cash wheat at Minneapolis finished the period 9¢@10¢ above early February. Cash wheat at Kansas City closed out March 10 approximately 7¢@10¢ higher than the comparable date a month earlier.

## Congress Argues Price Supports

The prolonged debate in Washington over the 1958 level at which the government will support basic commodities, particularly wheat, caused prices to fluctuate during the period. As proponents of higher supports gained ground to have wheat supports restored to 1957 levels of \$2 bu. the markets reacted bullishly, reaching a peak when the Senate Agricultural Committee made its recommendation for such restoration. However, weakness set in soon after as Ezra Taft Benson, secretary of agriculture, reiterated his stand for reducing levels on the 1958 crop 22¢ bu., indicating support—even to a presidential veto—for his actions.

## Wheat Parity Price Rises

Actually, the loan rate for wheat had already advanced beyond Mr. Benson's proposed figure of \$1.78 bu. when the controversy started, the result of a 1¢ rise in the parity price on Feb. 15. However, the Feb. 15 parity was still approximately 10¢ below the comparable level of a year earlier.

fy candy making. Arthur Keller, of Henry & Henry, Inc., Buffalo, demonstrated French pastry.

Fred L. Cobb, Cobb's Sunlit Bakery, Green Bay, Wis., described the many new kinds of uniforms for bakery salesgirls. His theme was "It's Time for a Change." Many Michigan bakers brought attractive salesgirls to serve as models for the various uniforms. L. Carroll Cole, Cole Bakeries, Muskegon, lectured to a morning workshop about cost control.

### What the Housewife Expects

Marguerite Robinson, field representative of the American Institute of Baking, moderated a panel of Michigan housewives for a popular afternoon program on "What the Housewife Expects in Bakery Products." The women voiced their opinions and ideas about prices, quality and other aspects of the bakery trade.

James G. Hays, retired dairy specialist of MSU, was the speaker for the evening banquet.

Cooperating, as in former years, to present this Michigan Bakers Educational Conference were the MSU school of hotel, restaurant and institutional management of the college of business and public service, the Michigan Bakers Assn., the Detroit Bakers Retail Assn., the Associated Bakers of Eastern Michigan, Associated Bakers of Western Michigan, and the Michigan Bakers Allied Trades Association.

## Summary of Flour Quotations

March 8 flour quotations, in sacks of 100 lb. All quotations on basis of carload lots, prompt delivery:

|                          | Chicago   | Mpls.     | Kans. City | St. Louis | Buffalo   |
|--------------------------|-----------|-----------|------------|-----------|-----------|
| Spring top patent        | 5.95@6.30 | ..@..     | ..@..      | ..@..     | ..@..     |
| Spring high gluten       | ..@..     | 6.13@6.23 | ..@..      | ..@..     | 6.70@6.90 |
| Spring short             | ..@..     | 5.93@6.03 | ..@..      | ..@..     | 6.50@6.70 |
| Spring standard          | 5.85@6.20 | 5.83@5.93 | ..@..      | ..@..     | 6.40@6.65 |
| Spring straight          | ..@..     | ..@..     | ..@..      | ..@..     | ..@..     |
| Spring first clear       | 5.40@5.85 | ..@..     | ..@..      | ..@..     | ..@..     |
| Hard winter short        | 5.55@6.00 | ..@..     | 5.57@5.45  | ..@..     | 6.20@6.42 |
| Hard winter standard     | 5.45@5.90 | ..@..     | 5.47@5.52  | ..@..     | 6.05@6.52 |
| Hard winter first clear  | ..@..     | ..@..     | 4.40@4.80  | ..@..     | ..@..     |
| Soft winter short patent | ..@..     | ..@..     | ..@..      | ..@..     | 7.93@8.12 |
| Soft winter standard     | ..@..     | ..@..     | ..@..      | ..@..     | 6.95@7.42 |
| Soft winter straight     | ..@..     | ..@..     | ..@..      | ..@..     | 6.19@6.43 |
| Soft winter first clear  | ..@..     | ..@..     | ..@..      | ..@..     | 5.06@5.33 |
| Rye flour, white         | 5.43@5.50 | ..@..     | ..@..      | ..@..     | 5.94@6.09 |
| Rye flour, dark          | 4.65@4.68 | ..@..     | ..@..      | ..@..     | 5.19@5.34 |

|                          | New York  | Phila.    | Boston    | Pittsburgh | *New Or.  |
|--------------------------|-----------|-----------|-----------|------------|-----------|
| Spring high gluten       | 6.78@7.08 | 7.00@7.10 | 6.78@7.08 | 6.80@6.94  | 6.45@6.85 |
| Spring short             | 6.78@6.88 | 6.80@6.90 | 6.78@6.88 | 6.64@6.76  | 6.30@6.50 |
| Spring standard          | 6.68@6.78 | 6.70@6.80 | 6.68@6.78 | 6.54@6.66  | 6.10@6.30 |
| Spring first clear       | 6.10@6.30 | 6.60@6.70 | 6.12@6.32 | 6.05@6.35  | 5.40@5.90 |
| Hard winter short        | 6.50@6.60 | 6.40@6.50 | 6.53@6.64 | 6.20@6.43  | 5.85@6.00 |
| Hard winter standard     | 6.35@6.45 | 6.30@6.40 | 6.38@6.49 | 6.05@6.28  | 5.75@5.85 |
| Hard winter first clear  | ..@..     | ..@..     | ..@..     | ..@..      | 5.20@5.50 |
| Soft winter short patent | ..@..     | ..@..     | ..@..     | ..@..      | 5.80@6.15 |
| Soft winter straight     | 5.90@6.30 | ..@..     | 5.92@6.32 | ..@..      | ..@..     |
| Soft winter standard     | ..@..     | ..@..     | ..@..     | ..@..      | 5.40@5.70 |
| Soft winter first clear  | ..@..     | ..@..     | ..@..     | ..@..      | 4.80@5.25 |
| Rye flour, white         | 5.80@5.90 | 6.05@6.15 | ..@..     | 5.83@5.88  | ..@..     |
| Rye flour, dark          | ..@..     | ..@..     | ..@..     | 5.08@5.13  | ..@..     |

\*100-lb. papers. \$Bakery wheat flour in 100-lb. papers.





### A B-E-T-S tablet for your Every enrichment need

Enrich with B-E-T-S and enjoy a double benefit afforded only by this *original* bread enrichment tablet.

1. Choose from 10 different varieties. This is the widest selection in the field . . . meets *every* enrichment need with minimum cost and maximum accuracy.

2. Profit by sharing in the extensive practical and technological experience accumulated since the very inception of the national

bread enrichment program in 1941.

Add to these *exclusives* super-fast tablet disintegration and uniform dispersion and it's clear why so many successful bakers agree . . . "B-E-T-S is the best way to enrich your bread."

And 2 important extras. B-E-T-S contains ferrous sulfate . . . highly assimilable form of iron at no extra cost. B-E-T-S with Vitamin D enables you to add this "sunshine vitamin" for less than 1/4¢ per 100 lbs.

See your Sterwin Technically-Trained Representative or write—or phone or wire collect—for details.

STOCKS SHIPPED FROM: Atlanta, Dallas, Denver, Evanston, Ill., Kansas City, Mo., Los Angeles, Minneapolis, Portland, Ore., Rensselaer, N. Y., St. Louis, Mo., and San Francisco.

## Sterwin Chemicals, Inc.

Subsidiary of Sterling Drug Inc.  
1450 BROADWAY, NEW YORK 18, N. Y.

ENRICHMENT IS OUR BUSINESS

## Ring the Baker's Doorbell

Knott's Baking Co., Paris, Tenn., has announced the purchase of the Paris Baking Co. Knott's has closed its Ruff St. plant and will operate from its N. Poplar St. plant.

Wis., as a branch of the Grebe Baking Co. Mrs. Vernie Berquist will manage the new bakery.

The Haas Bakery, Renville, Minn., has been sold by Mr. and Mrs. Peter Haas to Frank Cole, formerly of Cosmos, Minn.

A drive-in bakery has been opened at 5132 W. Lincoln Ave., West Allis,

Northwest Bakeries Co., Inc., has filed a charter of incorporation at Dover, Del. Authorized capital stock of the firm is \$100,000.

Ralph's Grocery Co., Los Angeles, has opened a new bakery at 4845 San Fernando Rd., Ralph's industrial center.

Mr. and Mrs. Carl Koenegstein, owners of the Koenegstein Bakery in Sparta, Ill., have moved their business to a new location on Market St.

The Holsum Bakery at Boonville, Mo., has announced plans to establish a relay station and two bread routes at Moberly, Mo., at an estimated cost of \$15,000.

The Eldorado Pastry Shop has been opened in Eldorado, Ill., by A. J. Caraway and Kenneth Henson.

Recent expansion plans of the Elterbrock Bakeries at 1444 N. 13th St., St. Louis, have included installation of a new automatic shortening injection pump for the firm's doughnut production department.

Karl Kuehner, Minster, Ohio, baker, has retired. His business is now being operated by a son, Thomas Kuehner.

Byron Fournier, Warren, Minn., is the new owner of the Hallock (Minn.) Bakery, having purchased it from the former owner, Mrs. Patricia Russell.

The Pastry Shop, 713 Ave. G., Madison, Iowa, has been leased by Wendell Faudree, Burlington, Iowa, from Mr. and Mrs. George Consbrock. Mr. Faudree was formerly manager of the Hy-Vee Bakery at Burlington.

Mr. and Mrs. Harry Cable of Grand Marais, Minn., are the new owners of the Morgan (Minn.) Bakery.

Carl Martin, operator of a bakery at Madrid, Iowa, since 1946, has announced that he will open a bakery in Creston, Iowa.

William Golbow has been named manager of the Federal Bake Shop, 227 Capitol St., Charleston, W. Va.

Star Donuts, 1357 Hartford Ave., Johnston, R.I., has been started by Norman Arsenault. He formerly managed the Donut Kettle Bakery, Mantown Ave., Providence, R.I., and later bought the business.

The Sun Rise Bakery has been established at 278 Walden Ave., Buffalo, N.Y., by Adolf Zasowski.

The Royal Baking Co. has been established at 108 Box Ave., Buffalo, N.Y., by Anthony F. Madonia.

Owen's Purity Bakery, Norman, Okla., has closed.

Clinton Green, Green's Pastry Kitchen, 203 S. Arlington St., Akron, Ohio, has announced the opening of a new store, his second, at 96 W. Thornton St.

Baker Boy Bakery, Cushing, Okla., has expanded by putting in a retail bakery in Escoes Red Bud supermarket.

Owen's Purity Bakery, Norman, Okla., has filed bankruptcy proceedings.

Mr. and Mrs. Raymond Miller have purchased the City Bakery at Ida Grove, Iowa, from the Lottie Schmidt estate.

John McCord has purchased the Glenwood (Iowa) Bakery from Ernie Busig. Mr. McCord is a native of Greta, Neb.

Weybosset Pure Food Markets, which operates its own bakery at 66 Weybosset St., Providence, R.I., is making plans to build a new supermarket in East Providence. This would give the chain four supermarkets.

### The Williams Bros. Co.

Merchant Millers KENT, OHIO, U.S.A.  
Millers of Soft Winter Wheat.

We specialize in laboratory controlled production of superior Cake, Pastry and Cracker Flours from carefully selected wheats.

### "RUSSELL'S BEST" "AMERICAN SPECIAL"

Our mill is located in the high protein wheat district of central western Kansas, and secures most of its wheat directly from growers.

RUSSELL MILLING CO., Russell, Kansas

### Lyon & Greenleaf Co., Inc.

MILLERS OF  
High Grade Soft Winter Wheat Flour  
Plain and Selfrising  
LIGONIER, IND.

### You can make better bread with SUNNY KANSAS Flour

WICHITA  
Flour Mills, Inc.  
WICHITA, KANSAS

### WHITE WHEAT

Low Protein Cake  
and Cookie Flours  
AMENDT MILLING CO.  
Monroe, Mich.

### "ROCK RIVER" "BLODGETT'S" RYE "OLD TIMES" BUCKWHEAT

All Grades—From Darkest Dark to the Whitest White  
—Specially Milled by the Blodgett Family—Since 1848

FRANK H. BLODGETT, Inc., Janesville, Wisconsin

# LOCATED BEST IN THE ENTIRE MIDWEST!

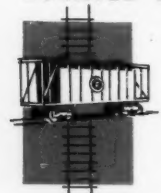


The BEARDSTOWN  
MILLS CO.



Shipments from the Beardstown Mills to you are faster because they have fewer terminals — fewer congested gateways through which to pass. You benefit in savings of time and money!

### LOCATED BEST FOR SPEEDY SHIPMENTS, TOO!



Located ideally to receive wheat from all three major wheat producing areas, The Beardstown Mills can select from districts producing the finest wheat suitable for milling the very best flour!

### QUALITY CONTROL IS THE WATCHWORD

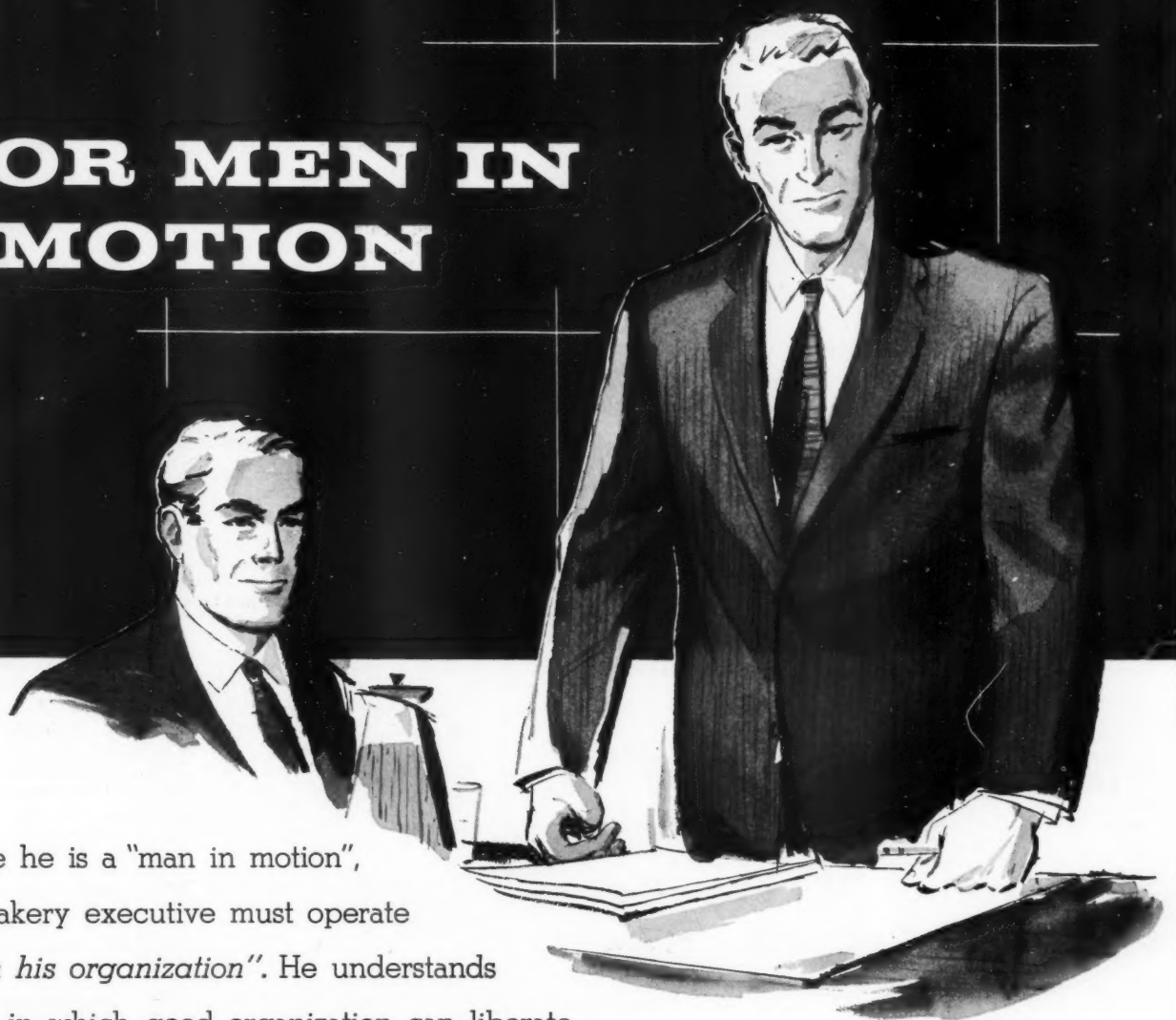
... throughout every step of the milling operation!



*The Beardstown Mills Co.*  
BEARDSTOWN, ILLINOIS

Producers of Spring, Hard and Soft Wheat Flours since 1876

## FOR MEN IN MOTION



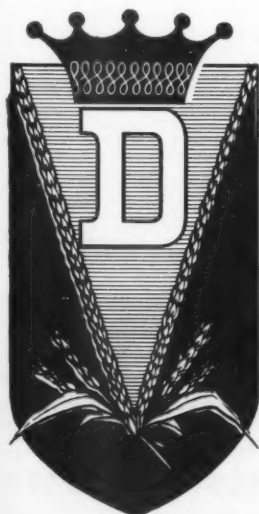
Because he is a "man in motion",  
today's bakery executive must operate

"within his organization". He understands  
the ways in which good organization can liberate

and intensify his own energies. For key positions, he selects men with sound  
judgment... men with foresight and courage who can make their own decisions. Equally  
important to successful bakery operation is

wise choice of ingredients. For perfect, uniform results  
that maintain a reputation for quality  
baking... the "man in motion" chooses Drinkwater Flour.

MORE SOUTHWESTERN BAKERS HAVE USED DRINKWATER  
FLOUR FOR MORE YEARS THAN ANY OTHER BRAND



## DRINKWATER FLOUR

Morten Milling Company, Dallas, Texas

A Division of Burrus Mills, Incorporated





Although we have one of the newest flour mills in the United States, we have just completed a new remodernization program. Result—increased sanitation—increased efficiency—increased capacity.

Our capacity was increased more than 50%. As a result, we welcome inquiries from quality-minded bakers who prefer a short patent mellow spring wheat flour.

**TRI-STATE MILLING CO.** Rapid City, S. Dak.

## Exceptional Bakery Flours NO-RISK EX-HI NO-RISK PLA-SAFE

THE ABILENE FLOUR MILLS CO.  
ABILENE, KANSAS

Capacity 3,700 Cwts. Daily

Grain Storage 2,250,000 Bus.

All Grades

**RYE FLOUR**

1000 cwts. Flour—250 cwts. Meal

**GLOBE MILLING COMPANY**  
WATERTOWN, WISCONSIN



Country-Milled from Country-Run Wheat located in the heart of America's foremost wheat producing section.

INDEPENDENT OWNER MANAGED

*The*  
**WALL-ROGALSKY MILLING CO.**  
MEPHERSON, KANSAS

kets, each with large bakery departments. Albert Korzen is in charge of bakery production for the chain.

Mr. and Mrs. Charles Wright have opened their new Wright bakery at 117-119 N. Michigan Ave., Big Rapids, Mich. The firm was formerly the Ovaitt Baking Co., and was bought by Mr. Wright and his father, Robert. The elder Wright sold out to his son several years ago.

Carl Freedman has opened the Willard Center Bakery, a retail shop located at 228 Prairie Ave., Providence, R.I., in the new Willard Ave. shopping center. He also owns a bakery at 208 Union St.

The 76-year-old Bergeron Baking Co., Rochester, N.H., has been sold to John J. Nissen Baking Co., Portland, Me. The Nissen company acquired the Bergeron routes, trucks and stock-in-trade, but Mr. Bergeron retained title to the building and equipment.

Ray's Bakery, Avon Park, Fla., has been opened by Mr. and Mrs. Ray Langford. Mrs. Langford will manage the bakery.

Bamby Basilio, for several years manager of the bakery at Carr's restaurant, at 107 Angell St., Providence, R.I., has bought the Wayland Bakery, 202 Wayland Ave., from Daniel F. Joy. Mr. Basilio is now operating it as the Wayland Square Bakery. Mr. Joy has moved to Florida and entered another line of business.

Gail O'Sullivan of Franklin, Ind., has rented the former Wurtz Bakery, Edinburg, Ind.

Russ Fader has opened a new retail shop at 9205 W. Center St., Milwaukee. Mr. Fader continues to operate his shop and production quarters on N. 35th and W. Silver Spring St.

Gruber's Bakery has opened a new branch in the New Hartford (N.Y.) shopping center.

The Stillwater (Minn.) Bakery has been remodeled. New enclosed wall cases and a counter have been installed.

Pete's Bakery, Inc., 233 South Union St., Lawrence, Mass., has filed articles of incorporation to conduct a general pastry and baking business. Peter Zinno is president and treasurer.

The Firsch Baking Co., Erie, Pa., recently purchased from the Meadville Bread Co., Meadville, Pa., its wholesale distribution and future use of two Meadville brand names, Flav-Rite and Sweetheart, as well as seven trucks.

The Continental Baking Co. will build a \$40,000 distribution center on Highway 1 N., about three and one half miles from Natchitoches, La. The new building is expected to be completed sometime during August, 1958.



T. E. Lauder

**TO NEW POST**—The appointment of T. E. Lauder as sales manager of Ekco Engineering Co. has been announced by H. W. Gillespie, executive vice president. Ekco Engineering is a division of Ekco Products Co. and is responsible for all of the firm's bakery pan and equipment sales and operations. Previously central region vice president of Ekco Engineering, Mr. Lauder will assume all sales management duties formerly handled by Thomas A. Dillon, who has retired. He will headquarter at the division's main office in Chicago. Mr. Lauder is a veteran sales executive in the bakery field and with Ekco. He joined the company in 1936 as a district representative in Chicago. Later he was district manager in Kansas City, and in 1954 took over central regional responsibilities. He was named a vice president of Ekco Engineering when the separate division was formed in 1957.

**"SLOGAN SPECIAL"**  
*The Quality Bakers Flour*  
**Oklahoma Flour Mills Co.**  
LLANO, OKLAHOMA

**STAR OF THE WEST**  
: : : *One of the Best* : : :  
**MILLING COMPANY**  
NIGHTINGALE and STAR Patent Flour  
Phone 2131 Frankenmuth, Mich.

**WOLCOTT & LINCOLN, Inc.**  
**GRAIN MERCHANTS**  
Operating:  
Chicago Great Western Elevator  
Kansas City  
Wolcott & Lincoln Elevator  
Wellington, Kansas  
Main Office: KANSAS CITY, MO.  
Board of Trade Building

FOR  
**SOYBEAN OIL MEAL**  
Call **DANNEN MILLS, INC.**  
St. Joseph, Mo. 3-0281

**ACME — GOLD DRIFT**  
*Better Bakery Flours*  
These Brands Meet Every Shop Need  
**ACME FLOUR MILLS, INC.**  
Oklahoma City, Okla.



## DCA Industries Acquires Michigan Flour Milling Firm

NEW YORK — David M. Levitt, president of DCA Food Industries, Inc., announced that the company had taken a major step forward in its program of diversification and expansion by acquisition of the F. W. Stock & Sons Co. of Hillsdale, Mich., flour millers since 1862.

F. W. Stock & Sons will maintain its headquarters in Hillsdale. Harold Stock, grandson of the founder, will continue as president. The company will operate as the flour milling division of DCA, which will include the milling facilities at Ellicott City, Md. This division will be part of the industry supply group of DCA, operating with Elmer Simony as president. Other officers of the Stock milling company will also continue their association with F. W. Stock & Sons and DCA.

In making his announcement at Hillsdale, Mr. Stock said, "Under this new plan the company will continue its growth and existence and, we trust, develop with modern times a greater success and stability and remain a Hillsdale industry in which we may all take pride. When my grandfather, the late Frederick W. Stock, purchased the mill in 1862, he hoped that it would develop into an important industry. Our family has continued this tradition. The mill has been improved and expanded for almost 100 years. The latest improvement was a \$250,000 construction program started in April, 1956, when 10 bulk tanks for flour and an air conveyor system were added. I am confident that DCA will continue this tradition. I believe, too, that their executives will take a lively and sincere interest in Hillsdale and its local problems," concluded Mr. Stock.

From New York, Mr. Levitt said, "We consider the acquisition of F. W. Stock & Sons a logical expansion of our services and facilities to the baking and food industries. We are delighted that Harold Stock will continue to serve as president and that his associates will also continue with us.

"Need for additional mixing facilities and flour milling products to serve the expanding volume of our business were responsible for this move. This has been highlighted by developments in the baking industry, plus the acquisition in 1955 of Chapman & Smith of Melrose Park, Ill., which, in 1957, had its highest volume in its 80-year history. The combined flour milling facilities of Hillsdale and Ellicott City will provide a diversified source of specialty flours required in the mix business and will also make available expanded production for special flours to serve the baking industry.

"Our central laboratories will be of help in safeguarding the tradition of quality, which has been well-known for so long in the trade for all F. W. Stock & Sons products."

—BREAD IS THE STAFF OF LIFE—

### Guest Speakers Set For AIB Sales Seminar

CHICAGO — Two "A.C.'s," both well-known executives and both with an affinity for travel, will again appear on the program of the March Sales Management Seminar at the American Institute of Baking.

Dr. A. C. Van Dusen, assistant

chancellor of the University of Pittsburgh, and A. C. Nielsen, Jr., president of A. C. Nielsen Co., Chicago, largest marketing research organization in the world, will join AIB staff members and university and industry leaders on the March seminar faculty.

Dr. Van Dusen has made the journey from Pittsburgh twice in the last two years to speak to the management groups. This year he will again be in Chicago twice, as two 1958 seminars are scheduled: March 16-28 and Oct. 12-24. Prior to 1956, Dr. Van Dusen served as vice presi-

dent and director of public relations at Northwestern University.

Mr. Nielsen has visited Europe several times as a marketing consultant to the U.S. government, working with representatives of several governments. In this capacity, he advised them on methods of raising the standard of living through improving marketing operations in their countries.

Dr. Van Dusen will lecture on psychology—the needs and wants of humans and how they can be satisfied. Mr. Nielsen's topic is consumer pat-

terns—where, what and why people buy.

For more information on the sales management seminars for 1958 or to obtain application blanks, write to Registrar, American Institute of Baking, 400 E. Ontario St., Chicago.

—BREAD IS THE STAFF OF LIFE—

### Virginia Bakers

RICHMOND, VA.—The fall meeting of the Virginia Bakers Council will be held September 5 through 8 at Natural Bridge Hotel, Natural Bridge. An agenda will be announced as soon as available.



*With BAKERS...*

**FLEISCHMANN is FIRST**

Consult your Fleischmann man about the additional benefits you can get—in Merchandising aid and Production help



# Uniformity

the priceless quality in flour

yours always with . . .

## Acme-Evans Flours

ANGELITE—cake flour

COOKIE KING—cookie and dough-up flour

CRACKER KING—cracker sponge flour

GRAHAM KING—100% soft wheat graham

PASTRY KING—low viscosity flour

Progressive Milling Since 1821

ACME-EVANS COMPANY, INC., INDIANAPOLIS 9, IND.

J. F. IMBS MILLING CO. ST. LOUIS, MO.

Millers of Hard and Soft Wheat Flour

DAILY CAPACITY 4,200 CWTs. SACKS

"Best Out West"

"Red Chief"

"Diamond D"

"Wheats Best"

Four Top Notch Spring Wheat Flours  
Sheridan Flouring Mills, Inc., Sheridan, Wyo.

## DO YOU KNOW . . . ?



Here's your chance to test your knowledge on a variety of subjects concerned with the baking industry. There are no encyclopedias for the bright boys, nor dunce caps either. When you have ticked off your answers, marking each statement TRUE or FALSE, turn to page 24 for a check against the correct statements. Each correct answer counts five points. A score of 70 is passing, 80 good, 90 very good.

1. When it is desired to use some soft wheat flour in making bread using the sponge dough method, it should be used in the sponge, not in the dough stage.

2. The temperature for heating the eggs and sugar for making sponge cakes should not exceed 120° F.

3. Pastry flour is usually specified instead of cake flour when making cookies.

4. A good pie dough should consist of 50% soft wheat flour and 50% hard wheat flour.

5. The use of about 10 to 20% invert syrup or honey in coconut macaroons will decrease the tendency to dry out.

6. New bread pans should be conditioned for baking by placing in an oven having a temperature of about 460 to 475° F. until they have turned a bluish color.

7. Corn syrup is about 30% sweeter than glucose.

8. When making bread, milk solids should never be added with the flour. The resulting bread will not be of good quality.

9. To eliminate settling of cornstarch in custard pies, the starch should be cooked before adding it to the custard filling.

10. Cinnamon used in yeast raised doughs has a retarding effect upon fermentation.

11. Many loaf cakes produced have a very irregular crack on top. There is no procedure known that will produce a nice crack down the center of the cakes.

12. Although shortening is used in making a number of sponge cakes, it is never used in making angel food cakes.

13. In a well controlled fermentation room, evaporation losses in bread doughs can be held down to ¼ of 1%.

14. Hard rolls should contain high percentage of sugar in order to produce a crisp crust.

15. A twist loaf of bread should be baked for a longer period of time than a plain round top loaf of bread.

16. A product called lecithin is used by biscuit and cracker bakers in their chocolate coatings to decrease the tendency to turn gray.

17. The object in cross-panning bread is to obtain greater volume.

18. Dextrose (corn sugar) used in pie doughs will improve the crust color of the baked pies.

19. Honey contains about 90% invert sugar.

20. When melted shortening is used for washing the strips when making cinnamon rolls that have to be refrigerated, the strips are apt to uncoil during the refrigeration period.

### DAVID HARUM BAKERS FLOUR

From Nebraska's  
Choice Winter Wheat

LEXINGTON MILL & ELEV. CO.  
LEXINGTON, NEBRASKA

### THE KANSAS MILLING CO.

WICHITA  
MOUNDRIE AND MARION

## POLAR BEAR FLOUR IS KING



Quality Beyond Question . . . has always been the rule in the production of POLAR BEAR flour. That's why POLAR BEAR always has that extra measure of value that assures smooth, dependable baking all the way.

FOUNDED BY  
ANDREW J. HUNT-1899

The NEW ERA MILLING CO. KANSAS CITY, KANSAS



# PIKES PEAK

## BAKERY FLOURS



The COLORADO MILLING & ELEVATOR CO.  
General Offices: Denver, Colorado

Isabell Lake and  
Arapahoe Peaks,  
Colorado Rockies

*Peak Performance... Superior Service*

# 1957 WINNER



*and still champion!*

# NEBRASKA WHEAT

1957 acreage **99.6%** "good to excellent"

Nebraska's 1957 wheat crop is in and varieties with "good to excellent" milling and baking characteristics constitute 99.6% of Nebraska's wheat acreage. Strong gluten varieties constituted 67.8% and mellow gluten varieties 31.8%.

Year after year, you can depend on quality-conscious Nebraska growers for wheat that produces flour which has adequate mixing time, proper mixing tolerance, high absorption, better baking performance, and improved loaf quality.

Always Pick the Champion . . . *Nebraska Wheat*

NEBRASKA GRAIN IMPROVEMENT ASSOCIATION  
340 AGRONOMY BUILDING  
COLLEGE OF AGRICULTURE, LINCOLN 3, NEBRASKA

Please send further information about the  
milling and baking qualities of Nebraska Wheat.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

NEBRASKA GRAIN  
IMPROVEMENT



ASSOCIATION  
LINCOLN, NEBRASKA

Cooperating with the College of Agriculture  
and the Nebraska Wheat Commission.



## Bakery Shop Has Cathedral Replica As Window Display

BUFFALO—The Haas Bakery here is almost stopping traffic, according to reports, with a pastry replica of the majestic old "Koelner Dom," or Cathedral of Cologne, Germany. The model, covered with royal icing, is in the bakery window, and was made by Alfons Wimmer, a Haas baker and native of southern Bavaria.

Mr. Wimmer's pastry cathedral required 40 hours to build, while the real one in Cologne was in the building stage for more than 500 years.

Underneath the 50 lb. of icing on his cake Mr. Wimmer has placed a cardboard framework made of plans drawn from his memory of the cathedral. Different parts of the replica were made at his home, while Mrs. Wimmer and a four-year-old daughter acted as "sidewalk superintendents."

The complete cake-cathedral weighs 80 lb. It is three feet long and two feet high. The windows are of colored tissue, and the 12 entrances of brown paper.

Down the front steps of the masterpiece Mr. Wimmer has placed a pink ribbon simulating carpeting. And on the ribbon stand small figurines of a bride, bridegroom and bridesmaids. (Mr. Wimmer made the model as a complement to displays of wedding cakes that will flank it.)

Mr. Wimmer's architectural excellence with baked foods has been used at Christmas to make a manger scene in royal icing, and at other times to make a couple of gingerbread houses from the classic story of Hansel and Gretel.

At one time in 1945, while a prisoner of the Russians, Mr. Wimmer thought he might never bake again. But when the war ended he was repatriated, and returned to his craft.

Of his interest in creative baking, Mr. Wimmer has this to say: "I like to bake, but more than just baking, I like to make artistic things of my work."

His plans for the future are ambitious—he wants to make a replica of the Statue of Liberty and perhaps after that, one of the White House.

## Morgan Pennington Elected President Of Ohio Bakers

COLUMBUS, OHIO—Morgan Pennington, Pennington Bros., Inc., Washington Court House, has been elected president of the Ohio Bakers Assn. Raleigh Yaeck, Jersey Bread Co., Toledo, was elected first vice president, and Donald W. Webb, Jr., Pratt-Webb Pies, Inc., Cleveland, as second vice president.

Also elected were H. H. Gasaway, Omar, Inc., Columbus, treasurer; Clark L. Coffman, Seneca Hotel, Columbus, executive secretary, and J. Morton Schneider, the Richard W. Kaase Co., Cleveland, chairman of the board.

Harold H. Kahn of Cleveland, attorney, was retained as general counsel.

The meeting included announcement of plans to hold the 53rd annual convention of OBA in Cincinnati Jan. 10 through 13, 1959.

## Value of Dry Yeast Explained to Bakers

ST. LOUIS—William Barker of the bakery service division, Red Star Yeast & Products Co., stimulated members of the Greater St. Louis Bakery Production Club recently with a discussion of the merits of dry yeast.

In other business, the group was given an announcement that plans are under way to again award the annual Victor Zimmerman Memorial Scholarship to the most eligible man between 20 and 35 living within 125

miles of St. Louis wishing to make a career of baking. The scholarship, offered by the Cahokia Flour Co. of St. Louis, provides \$1,000 to cover tuition and educational expenses.

—BREAD IS THE STAFF OF LIFE—

### FALL CONVENTION

BOSTON — Announcement has been made of the 1958 fall convention of the New England Bakers Assn. to be held at the Sheraton Plaza Hotel in Boston Nov. 17 and 18. NEBA will again limit the fall meeting exclusively to members, based on the success of a similar policy carried out at last year's meeting.

### ADVERTISEMENT

## Exciting Discovery Sparks New Raised Donuts Economy Package



AL SAUNDERS

Based on a new discovery in raised donut mixes, Al Saunders has his trade happily hopping over a wonderful new economy package of 12 raised donuts to sell for 43¢. The new mix



gives the donuts 24 added hours of shelf life; keeps them fresher, provides greater glaze stability. At the new low economy price a big wide door is opened up to budget minded buyers.

Al is a keen merchandiser and offers a complete marketing program which includes a beautiful new carton, the new mix, new display material and field technical and merchandising service . . . a real winner for every baker seeking increased donut sales.

## Gordon Mohns Launches Success-Proven Plan to Sell More Sweet Goods in Grocery Stores . . .

Gordon Mohns started a new exciting plan among key bakers in the Midwest to capture the big demand for higher quality sweet goods. Here's how it works:

Starting off with the need for a higher quality product that stays fresh longer, the plan includes a new,

sales-sparking foil-lined package that retains freshness and can be quickly heated in the oven . . . strongly backed up with success-assured know-how in every department: 1. Technical man assists by working with baker's production department. Makes up variety products for rotated pro-

gram; provides the high quality fillings and toppings. 2. Advertising and merchandising set-up with beautifully colored point-of-sale material provided. 3. Services of field merchandiser to assist baker's salesman to launch the program successfully in stores or on home service routes.



GORDON MOHNS

## New Method Automatically Makes 6 Types of Donuts



Combination Doco Cutter and Pressure Blade Conveyor

"ECONOMY" is the big word in this new method of automatically producing variety donuts.

"VARIETY" is the big key to build big donut sales in today's market. But, to make money with variety donuts you need the economy of automatic production.

The combination of the famous Doco

Cutter and the new Pressure Plate Rounder conveyor enables you to produce automatically:

(1) Glazed yeast raised donuts (2) rounded bismarks (jelly donuts) (3) yeast raised sticks or long johns (4) yeast raised or cake twists (5) cake sticks (6) hand cut type cake donuts.

**DCA FOOD INDUSTRIES INC.**  
45 West 36th Street, New York 18, N. Y.  
West Coast: 1255 67th St. Oakland, Calif. Canada: 579 Richmond St. W. Toronto



## DCA HAS THE FACTS FOR YOU

Every DCA field man is offering these two strong, complete promotions to help you increase your sweet goods and donut sales in today's markets.

For immediate complete details, write, phone or wire DCA.

## G. G. Grant Given SBA University Fund Position

ATLANTA, GA. — G. G. Grant, president and director of American Bakeries Co., has been appointed as co-chairman of the Southern Bakers Assn. University Fund, Inc. The appointment was made by O. L. Allen, chairman of the board of SBA. Mr. Grant's office is in Atlanta, and he has served not only as a trustee

for several years but also as governor of both the American Bakers Assn. and SBA.

Sanford V. Epps, president of H. H. Claussen's Sons, Inc., Augusta, Ga., is chairman of the board of trustees of SBA University Fund, Inc., and has served in this capacity since 1955. He is a past president and past chairman of the board of SBA and, at present, is first vice president of ABA. The trustees set policy for student loan funds provided by SBA. To date, 44 students have graduated with B.S. degrees in baking from Florida State University, Tallahas-

see. Currently, there are 60 enrollees in the baking science and management school under the direction of Dr. L. A. Rumsey, director of the baking industry program.

### Trustees Named

This is the only 4-year baking school in the country and was founded in 1950. The following have been named to the board of trustees for three-year terms: Lloyd C. Bost, Bost's Bakery, Shelby, N.C.; T. K. Krug, president of Liberty Baking Corp., Jamaica, N.Y.; Joe Lowe, Joe Lowe Corp., New York City; R. L. Nafziger, Interstate Bakeries Corp.,



G. G. Grant

Kansas City, and J. Roy Smith, Smith's Bakery, Mobile, Ala.

Other trustees presently serving are: Jodean P. Cash, Fuchs Baking Co., South Miami, Fla.; E. J. Derst, Jr., Derst Baking Co., Savannah, Ga.; A. R. Fleischman, Standard Brands, Inc., New York; Ogden A. Geilfuss, Southern Bakeries Co., Atlanta, Ga.; Harry Mutch, Mutch's Bakery, Orangeburg, S.C.; Charles D. Singleton, Collins Baking Co., Montgomery, Ala.; Tom F. Smith, Anheuser-Busch, Inc., Atlanta, and Benson L. Skelton, SBA, Atlanta.

Ex-officio trustees are O. L. Allen, chairman of the board, SBA, and Lee R. Whidby, Jacksonville, Fla., president of Southern Bakers Allied Assn., Birmingham, Ala.

The five persons retiring from the board of trustees, whose terms have expired, are: R. H. Bennett, co-chairman, Criswell Baking Co., Atlanta; E. L. Harding, Krispy-Kreme Doughnut Corp., Winston-Salem, N.C.; William Kelley, Holsum Baking Co., Inc., Gastonia, N.C.; Brooks Pearson, Rush'n-Pearson, Inc., Atlanta, and James E. Stroupe, Atlanta.

—BREAD IS THE STAFF OF LIFE—

## Registrations Fill AIB Sales Seminar

CHICAGO — Advance enrollment for the annual sales management seminar to be held at the American Institute of Baking March 16-28 had all but filled the class at the time of the last report from AIB officials.

Enrollment in the course is limited to 30, and 29 applications had already been received. This number of enrollees, plus the contents of letters received by Dr. Robert W. English, director of education, show that many companies think of the two-week seminars as valuable programs for their sales managers, said AIB. Many bakeries have sent at least one representative to each seminar.

On the faculty will be AIB staff members, industry leaders, and mid-western university professors who will lead discussion groups, and encourage active participation by each man. The seminar faculty has received high praise from previous enrollees for its mastery of subject material and teaching ability.

Information on the sales management seminars for 1958 can be obtained from The Registrar, American Institute of Baking, 400 E. Ontario St., Chicago 11, Ill.



ANOTHER VALUABLE  
BROLITE

*Ingredient*

**B**rosoft is a tenderizing agent—a proved ingredient in convenient dry form. Easy to handle, it requires no changes in shop procedures.

Brosoft produces tenderness of crumb and crust. Improves texture. Results in better eating and keeping qualities—easier machining and make up.

Smoother slicing, too, with no gumminess. ... Many of America's best selling loaves are now made with Brosoft.

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COMPANY, INC.**

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Brolite's trained Bakery Technicians are at your service!





**"Yes! . . . Our Mills are right up to date!"**

Frank Lindholm, Superintendent of our Hastings Mill, Hastings, Minnesota, is proud to show "Mr. American Farmer" one of our mills on his tour of King Midas. We are a milling company that has always based its operations on main-

taining the most modern mills to produce the highest quality flour.

Constant vigilance and the highest milling integrity, to continually produce the best, that's what King Midas stands for, that's what we do!

***King Midas* FLOUR MILLS**  
MINNEAPOLIS **PV** MINNESOTA

On the job  
when it counts . . .  
AMERICAN NATIONAL  
RED CROSS





# From Air Slide to Pie Wash—Automation Performs Many Tasks for Baking Industry

By IRVIN O. ROHRBACH  
Standard Brands, Inc.

**EDITOR'S NOTE:** Mr. Rohrbach is assistant manager of the bakery products service department of Standard Brands, Inc. This talk was delivered to members of the New England Bakers Assn. at their last convention in Boston.

Automation has been improved to the extent that even in small retail

To bake the best . . .  
buy the best!  
**Quality Bakery Products**  
**NATIONAL YEAST CORPORATION**  
Chanin Building, New York, N.Y.

**CODING AND MARKING**  
Code dating and marking machines for the flour milling and baking industries. Coding bread wrappers, cellophane and packages, etc., our specialty.  
Write for information on a specific problem  
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**BAKING TRAINING**  
for Veterans and Non-Veterans in  
Bread and Rolls • Cakes and Pastries  
Experimental Baking and Decorating Included  
Scholarships Available—Write  
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An endowed non-profit trade school  
818 Wayzata Blvd. Minneapolis 3, Minn.

shops it can be applied with the use of improved equipment. I will touch on these applications as I go along because the most extensive use of automation has been applied to the production in the larger wholesale plants. I will break this down into different items produced.

Automation in bread today has reached a zenith of operation which was unheard of twenty years ago and in all probability will advance much more in the next twenty years. Automation begins at the loading dock with raw ingredients. Flour is handled today either in tote bins, trailer trucks, or the air slide railroad car. This has eliminated the handling of hundreds of bags of flour needlessly. A railroad car containing tote

bins can be unloaded by one man in approximately forty-five minutes as compared with several hours using three and four men to stack and store flour in bags on skids. With the railroad car or the trailer truck using the air slide system it is only necessary for one man to attach a hose to the outlet on either the trailer truck or railroad car and turn on the air system transferring the flour in a very short time to storage bins, some of which are horizontal while others are of the silo type. The flour is then automatically transferred from the storage bin by means of an air system to the scaling hoppers simply by pressing a button. Similar methods are used to transfer from storage bins or tanks other ingredients such as sugar (liquid or granulated), milk powder and liquid shortening. The dough mixer need only set his scale or meters in the mixing room for whatever ingredient he desires and the correct amount of said ingredient will be deposited in the mixer in a matter of seconds.

## Mechanization

Fermentation rooms for the sponge and dough method have also been mechanized to the extent that each sponge trough when inserted in one door of the fermentation room will automatically come out another door at the end of a pre-arranged fermentation period. Automatic hoists then deposit the sponge back into the mixer eliminating manual handling and

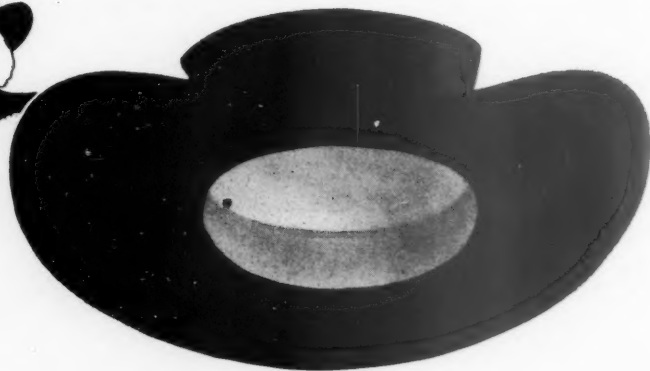


**EYE-CATCHER** — Expensive neon signs are not always necessary, especially when the retail store is small. Proof of this is found in the unique advertising sign used by Pupi's Pastries, Los Angeles, Cal. Fastened to the store front is an old-fashioned egg beater. It has been made large enough to cover three fourths of the store width, resulting in an eye-catching advertisement. Hurrying motorists see it, and because it is so unusual they remember where the bakery is located.

in a matter of seconds the dough is ready to be mixed.

Dough dividing equipment has advanced to the point whereby as many as 120 pieces of dough can be cut in a minute and molded with the facilities of twin molding equipment. A steady flow of production can be maintained using the automatic panners at the molding machine. With the use of a conveyor system pans of molded dough can either be automatically loaded into an overhead pan proofer which can be adjusted

(Turn to AIRSLIDE, page 28)



## KEEP THIS UNDER YOUR HAT:

QUAKER BAKERS FLOUR is specially designed for the specific needs of the modern baker. Costing no more than ordinary flours, this highest-quality short-patent flour has the versatility to create superior results in every bakery item you produce.

Call . . . Write . . . or Wire to:

**The Quaker Oats Company**  
Chicago, U.S.A.

Mills at Cedar Rapids, Iowa • St. Joseph, Mo. • Sherman, Texas  
and Los Angeles, California



# PERFORMANCE determines Cost

## HOW MIGHTY IS A PENNY?

Every successful baker is, and necessarily must be, a good business man. In the highly competitive baking industry, the difference between success and failure sometimes hinges on as little as a fraction of a penny in unit costs.

Those bakers who have installed cost accounting methods are discovering mighty interesting facts about ingredient costs. Take Midland Flours, for example.

The outstanding shop performance of Midland Flours means lowered production costs all the way down the line. Milled in accordance with *scientific* control standards, the name "Midland" is your absolute assurance of uniform baking results . . . means increased sales, too, through quality baked goods with increased consumer appeal.

It's just good business to use uniform-milled flours by Midland.



**Town Crier  
FLOUR**

UNIFORM-MILLED FLOURS BY

**THE MIDLAND FLOUR MILLING COMPANY  
NORTH KANSAS CITY, MO.**

## ANSWERS TO "DO YOU KNOW?"

Questions on page 16

1. **False.** The soft wheat flour should be used in the dough stage for best results. The protein in the hard wheat flour will have a better opportunity to develop when used in the sponge.

2. **True.** By not heating to over 120° F., the danger of cooking the

eggs is eliminated. By heating the eggs and sugar to 120° F. instead of using them at room temperature they will beat up faster and the cakes will have slightly more volume.

3. **True.** Pastry flour will produce cookies having somewhat greater spread. It is also lower in price than cake flour which is, of course, very important. While pastry flour will be somewhat darker in color than cake flour, this is seldom of importance in making cookies.

4. **False.** Hard wheat flour has no place in pie doughs as it causes toughness. To reduce this toughness

more shortening would be required, increasing the cost. An unbleached pastry flour produces the best results.

5. **True.** Both of these ingredients are hygroscopic. The percentages given are based on the sugar that they replace. As both honey and invert syrup contain about 20% moisture, a slight adjustment will have to be made in the amount of egg whites used in the formula.

6. **False.** The oven temperature should be around 425° F. The tin coating on the pans will melt at a temperature of about 440° F.

7. **False.** Corn syrup and glucose are identical products. They refer to the same ingredient. They are about 30 to 40% as sweet as sugar (sucrose).

8. **False.** Research work shows that there is little, if any, difference in the finished loaves when a good quality of milk solids is used.

9. **True.** When starch is used in making custard pies, it should be cooked with part of the milk and sugar in the formula. This cooked starch should be allowed to cool thoroughly and then stirred into the filling before it is placed in the pie shells.

10. **True.** The yeast content in the formula should be increased, or the fermentation time should be increased, to counteract the retarding effect.

11. **False.** To produce a nice crack down the center of the cakes, a regular dough scraper should be dipped in melted shortening and then pressed down in the center of the cake batter in the pans before the loaf cakes are placed in the oven. Melted butter, margarine or oil may be used, if desired.

12. **False.** A few bakers use a small amount of melted shortening in their angel food cakes. Usually about 1 oz. to each quart of egg whites is used. It is their opinion that the cakes have better keeping quality. In our opinion the keeping quality of angel food cakes is not much of a problem. As the addition of melted shortening decreases the volume of the cakes somewhat, we really cannot see very much value in using it.

13. **False.** Where the humidity in the fermentation room is not controlled, the loss during fermentation may run as high as 2¼%.

14. **False.** If high percentages of sugar were used in making hard rolls, a soft crust would be produced instead of a crisp one. A good high protein flour, properly fermented dough, and a fairly high percentage of shortening will help to produce a crispy crust. The use of some egg whites in the dough will help. Proper baking and steam in the oven are very important factors.

15. **True.** It has been found that a twist loaf of bread baked too fast is inclined to be tough inside (crumb) and also have a tough crust. This toughness can be decreased somewhat by replacing about 3% of the flour with potato flour.

16. **True.** Quite often the manufacturers of coating chocolate add this for the bakers. Lecithin, generally, is obtained from soybeans. It may be purchased from supply houses under various brand names.

17. **False.** Cross-panning, or cutting the moulded dough into four or five pieces and placing the cut sides of the pieces to the sides of the pans, will improve the grain and texture of the bread.

18. **True.** As dextrose caramelizes readily at the temperature used for baking pies, the crust color will be improved, and the crust will also be somewhat crispier.

19. **False.** It contains about 75 to 76% invert sugar.

20. **True.** This difficulty can be overcome by washing the strips with an egg wash instead of melted shortening. Too much egg wash should not be used, as this may result in an unappetizing appearance on the bottom of the rolls.

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FLOUR FOR PERFECT BAKING



ANOTHER GREAT FLOUR

Wheat for HUNTER flours is chosen from the cream of the crop for outstanding baking characteristics. But on top of that the skill and experience of HUNTER millers guarantee the uniform dependability of HUNTER flours. Their fine baking qualities are working steadily for the baker day after day.

THE HUNTER MILLING CO.  
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ONLY THE HUNTER MILLS BETWEEN THE WHEAT FIELD AND YOUR BAKERY



## "Service is our long suit"

Speaking of service, what a deal you get from Russell-Miller. Our network of mills is set up to deliver flour *when* you want it, *how* you want it. When you need technical help to solve a bothersome problem, the specialized services of our million-dollar laboratory can be yours. If you need a special blend, our "prescription service" may prove helpful. And all this costs you *not* a penny extra. Whatever your bakery flour needs, let Russell-Miller give you a hand.

### **RUSSELL-MILLER**

*Specialists in the milling  
of fine flours*



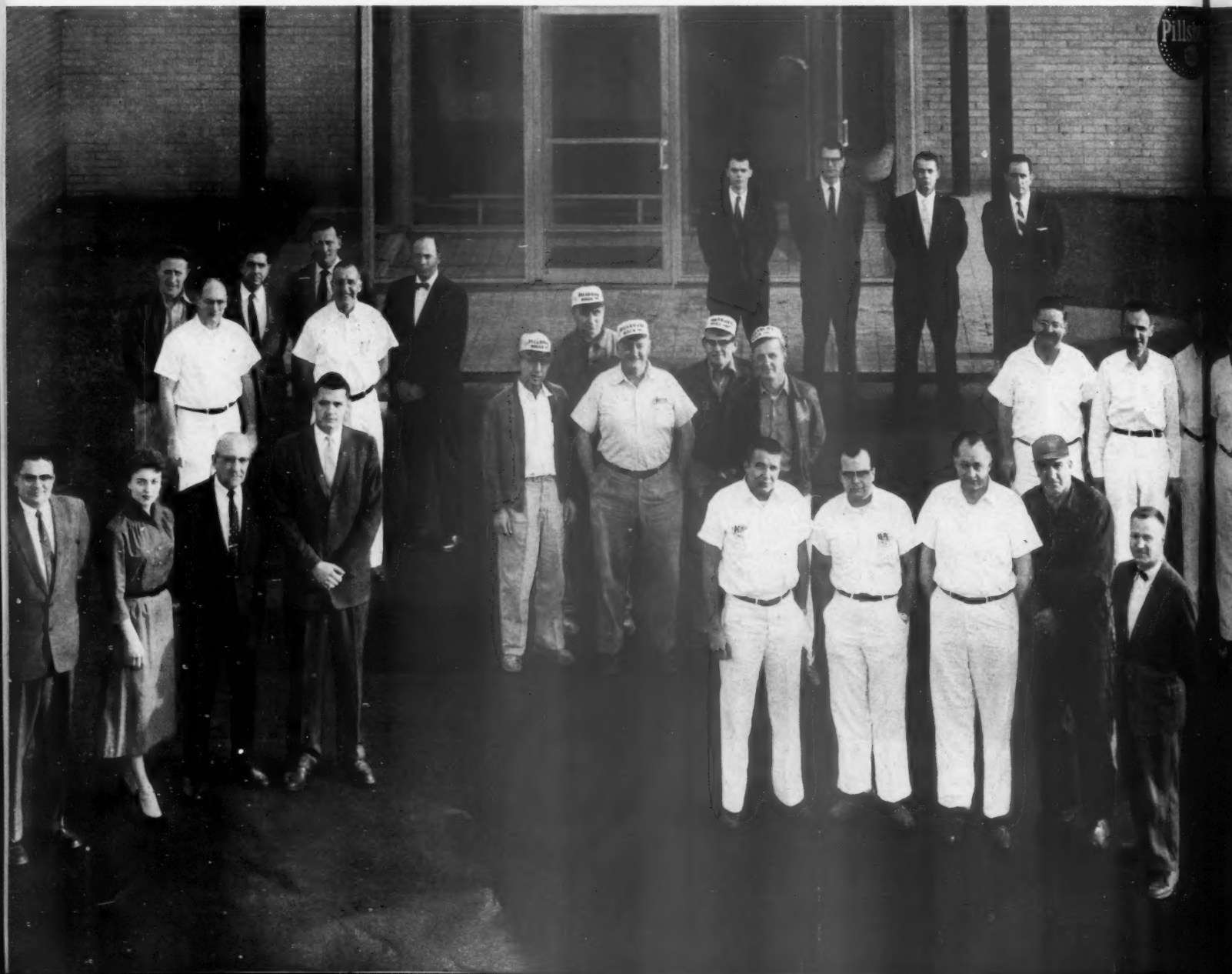
RUSSELL-MILLER Milling Co., Minneapolis 15, Minnesota: Millers of Occident, American Beauty, Producer, Powerful and other superb Hard Spring, Hard Winter and Soft Wheat Bakery Flours.

*What sells baked foods?* (NO. 6 IN A SERIES)

# PILLSBURY PEOPLE ...YOUR PARTNERS, TOO

In the mills, the offices, the laboratories, the grain elevators are people dedicated to helping you bake better products and build bigger sales.

It takes all these highly trained people and more to comply with your order for a carload of specially formulated flour or a sack of bakery mix. And to see that each Pillsbury product does the job for you in the oven and at the cash register.

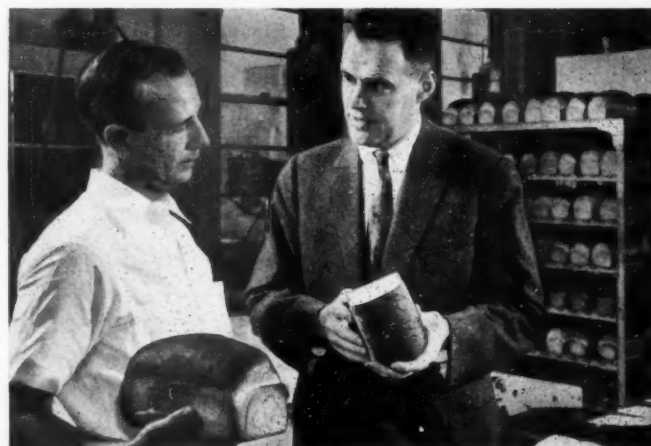




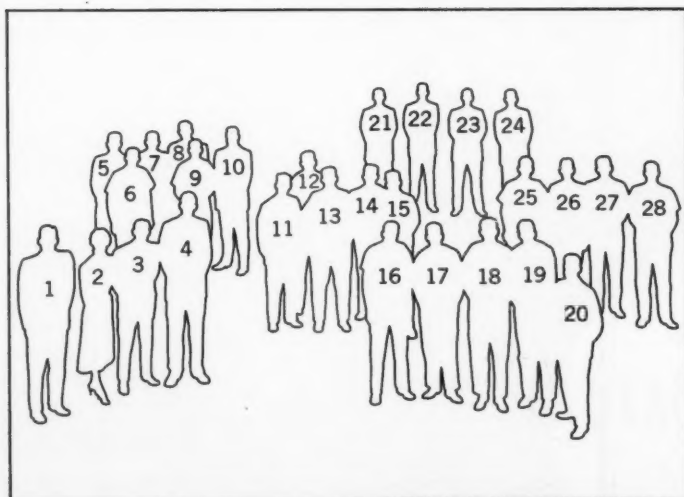
**HOW OUR PRESIDENT WORKS FOR YOU.** As a flour salesman, Paul Gerot learned that you've got to give customers the best right down the line. As president of Pillsbury Mills, he practices this. He insists on pioneering in food research, product research and milling methods to give you superior products and services year after year. Pillsbury's revolutionary, new Turbo-Milling process is the latest example of this leadership.



**PRODUCTION EXPERT WHO KEEPS QUALITY UP AND COSTS DOWN.** Ben Greer, Executive Vice President in charge of Pillsbury production and bulk food sales, is one of the nation's top milling men. He has initiated many new production and distribution techniques that boost efficiency. Result: Pillsbury can pay a premium for the finest ingredients, yet sell you superior products made from these ingredients at fair market prices.



**HE GIVES YOU MORE OF WHAT YOU WANT.** George Pillsbury, Bakery Products Division Vice President, directs the men who represent Pillsbury to you. He and his men offer you the services of all of the people at left. Technical men who help you solve baking problems. Advertising men who initiate the display ideas and promotions that help you sell more baked foods. Others who work on market research and analysis pertaining to your sales problems. Whenever you need the help of these people, feel free to call on George Pillsbury or your Pillsbury man.



*Your baking partners at Pillsbury:* 1) distribution center manager, 2) sales order clerk, 3) salesman, 4) sales administrator, 5) truck driver, 6) technical serviceman, 7) milling development engineer, 8) economic biologist, 9) test baker, 10) production scheduler, 11) packer, 12) loader, 13) miller, 14) warehouseman, 15) maintenance engineer, 16) quality control chemist, 17) raw materials inspector, 18) fats and oils chemist, 19) wheat sampler, 20) packaging engineer, 21) IBM machine operator, 22) grain buyer, 23) business analyst, 24) merchandising manager, 25) biochemist, 26) cereal chemist, 27) flour research engineer, and 28) food technologist.



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**Fisher's** THE largest and most modern flour mill and elevators on the Pacific Coast with storage capacity at our mills of 2,500,000 bushels, together with more than one hundred elevators and warehouses in the choicest milling wheat sections of Montana, Idaho and Washington, insure the uniformity of all Fisher's Flours.

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Domestic and Export Millers  
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## SPRING WHEAT FLOURS

### RED WING SPECIAL BIXOTA

### CREAM of WEST

PRODUCE BREADS WITH TASTE APPEAL

**THE RED WING MILLING CO.**  
RED WING, MINNESOTA

*Wheat Washed with Our Own Artesian Well Water.  
Flour Tested and Baked in Our Own Laboratory.*

## "Golden Leaf" FLOUR



Milled from choice spring wheat under modern laboratory supervision for particular bakers—aged—aerated—bulk or sack loading.

*In Business for 57 Years*

**TENNANT & HOYT CO.**  
LAKE CITY, MINNESOTA

## AIRSLIDE

(Continued from page 22)

for any prescribed pan proofing time or can be loaded on racks, proofed in the normal manner, and then automatically loaded into the oven from a unit which unloads the racks shelf by shelf.

Tunnel type ovens have been automated using "De-Lidders" which, through a series of magnets, lift the lids from the pullman pans at the discharge end of the oven. With the use of conveyors, the lids are returned to the loading end of the oven where they are then ready to be reused.

There was also an idea whereby, with a tunnel type oven, travelling lids could be used. These lids were placed in the oven, geared to the same oven speed as the pans, and were automatically set directly on top of the pans during the baking process. After the bread is baked, it is automatically depanned. The pans are returned to the molder by the use of a conveyor and are cooled in the process. The bread is carried to a tray type cooler either by gravity or by the use of a conveyor. After the bread has traveled through the cooler and is ready for slicing and wrapping, electronics take over to control the flow of bread to the wrapping machines.

Today, one man can operate four bread wrapping machines if the bread is carried away from the wrappers by conveyors to the point of distribution. Three machines usually are in operation at one time with one in reserve. When the paper or end labels need replenishing, the wrapper will automatically stop, the reserve machine will start and electronic controls will guide the bread to the machine.

Several years ago, there was a method devised which would help eliminate time consumed in setting sponges. I have reference to the liquid ferment or brew method of making yeast-raised dough products. There were several innovations of this method. One whereby 6% nonfat dry milk is used as the buffer during the brew fermentation period, and another whereby a chemical buffer is added to the brew and the ingredients of the dough can be used at any desired level. This method is used very successfully in various parts of the country.

Automation has gone a step further whereby basically a brew or broth is set and metered into a mixing machine along with the other ingredients of a bread dough and mixed vigorously for a period of 90 sec. The dough is then forced by an extrusion method through a nozzle and deposited into pans, proofed and baked. Some innovations have been made in this method such as depositing the extruded dough pieces on a belt, then dusting them with starch, and molding them with a conventional cross grain molder.

### Modification

It has also come to our attention that a modified method of continuous bread production is being employed in some parts of the country. This method also employs the use of a liquid ferment, but different methods of mixing and make-up are employed. The dough which can be described as a straight dough, is set in the mixing bowl, fermented for a period of time, and then remixed. The unique feature of this type process is the employment of straight vertical type blades which operate counter clockwise to the rotation of the mix-

ing bowl. These mixing blades are driven at 90 rpm and mixing time is usually 6 or 7 min. The dough is given very little floor time and is taken directly to the divider. The dough pieces then are conveyed from the divider directly to the molding machine. The use of a rounder and an overhead proofer usually employed for the relaxation of dough pieces is eliminated in this process.

### Cake Manufacturing

The manufacture of cake today has been automated to the extent that the raw ingredients are pre-scaled and mixed into the form of a slurry which is pumped into a holding tank. This holding tank is merely a reservoir which assures that sufficient batter is available to be pumped through the mixing head of the machine. The mixing head contains several plates with serrations and teeth. In the process of forcing the slurry through the mixing head, air is metered into the batter producing a highly emulsified mix. The mixing time is governed by the temperature and specific gravity desired in the slurry and finished batter. Any type formula may be used in this process if it does not contain fruit or nuts, and if the batch size is such that a continuous flow of batter is always available at the depositor. The cakes produced using this equipment have a fine grain and normal volume using reduced scaling weights. Another relatively new machine that can be used in continuous cake mixing, eliminates the pre-mixing of the slurry I mentioned before. Using this equipment all the ingredients in the formula are put directly into the mixing tank. The tank is then closed, air pressure brought up, the machine turned on, and the cake batter produced in a continuous flow. If production is very high, the manufacturers of this equipment usually recommend the use of two such tanks for one mixing machine, whereby one tank can be re-filled while the other batch is in the process of mixing, so that there will be no breakdown in the continuous flow of batter to the depositor. These machines are also made in a 7.5 qt. capacity model which could be utilized in the average retail bakery.

### Automatic Loading

After the cake batter is deposited in the pans, conveyors carry the pans to the oven and are loaded into the oven automatically. After baking, the pans containing the cakes are conveyed away from the oven. The cakes

BROKERS & DISTRIBUTORS  
WANTED FOR  
NAPPANEE QUALITY  
**CORN MEAL**  
With NAPPANEE MILLING CO.  
NAPPANEE, IND.

**Moore - Lowry Flour Mills, Inc.**  
Kansas City, Mo.  
**PRECISION-MILLED FLOURS**

**Michigan Soft Wheat Flour**  
Plain and Self-Rising  
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# A Remarkable Pair



**STAN-EX**—a high quality egg yolk replacement product for sweet rolls, coffee cakes, doughnuts, cookies and partially baked goods.

**STAN-WHITE**—stabilized powdered egg whites, for angel foods, layer cakes, cookies, icings, pie fillings, meringues, marshmallow and other toppings.

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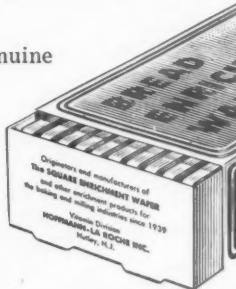
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Roche engraves the Roche name on each wafer to make sure you always get the genuine square bread enrichment wafer guaranteed and made only by Roche.

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| <p><b>1. ASSURED POTENCY</b></p> <p>Enrichment assured when SQUARE wafers are used as directed.</p> | <p><b>2. QUICK DISINTEGRATION</b></p> <p>Complete disintegration in agitated water in yeast emulsifier.</p> | <p><b>3. SUPER-THOROUGH DIFFUSION</b></p> <p>Flour-fine particles insure even distribution throughout each loaf.</p> | <p><b>4. FINER, MORE BUOYANT PARTICLES</b></p> <p>SQUARE wafers give you thousands of particles, longer suspension.</p> | <p><b>5. CLEAN, EVEN BREAK</b></p> <p>Wafers break clean into halves and quarters, for odd-sized doughs.</p> |
|---|---|--|---|--|

Look for the name ROCHE—your guarantee on the Wafer with the Warranty. Order from your yeast company salesman today.

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PLUS MODERN LABORATORY CONTROL  
ASSURES THE BAKER EXCELLENT RESULTS WITH:**



**HUMMER—Spring Hi-Gluten  
LIBERTY—Short Spring Patent  
BEST PATENT—Standard Spring Patent  
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CAKE and PASTRY FLOURS  
RYE—White - Medium - Dark**

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NEW SPOKANE MILL ONE OF  
THE WORLD'S MOST MODERN

MILLS AT SPOKANE • WENATCHEE • RITZVILLE • PORTLAND



**BAKING STUDENTS FETED**—The staff and students of Dunwoody baking school, Dunwoody Industrial Institute, Minneapolis, were recent guests of the Rap-In-Wax Paper Co. of Minneapolis. The group met at the Town and Country Club in St. Paul where W. A. Anderson, manager of the bakery packaging division of Rap-In-Wax, welcomed them. A luncheon was served, after which H. D. Whitney, director of sales, bakery division, discussed packaging materials used in wrapping bread. Donald D. Davies, art director, gave a talk on the importance of the proper designing of bread wrappers. He also discussed the selection of colors used for bread wrappers. Clarence Lithio, director of the service department, gave a talk on types of wrapping machines, care and up-keep. He stressed the importance of checking heating elements and keeping machines clean. A question and answer session was then held, followed by a trip to the Rap-In-Wax plant, where guides explained the uses of various pieces of equipment and answered questions asked by members of the group.

are manually depanned onto an overhead conveyor for cooling. The discharge end of the conveyor is located in the finishing department where, after proper finishing, the cakes are conveyed to the wrapping or boxing machines and then again conveyed to the point of distribution.

Through the years, methods have been devised to automate sweet goods production so that less hand work is involved. Make-up tables were devised to eliminate some of the hand work experienced 20 years ago and very recently a machine has been manufactured whereby the finished mixed dough need only be deposited into a hopper attached to the top of this new machine. It then goes through a positive pressure head which forces the dough through an extrusion nozzle. These nozzles are available in varying sizes depending upon the type of merchandise manufactured. This method produces a continuous sheet of dough which then goes through the normal make up operation such as oiling, filling application, and curling, if so desired.

This machine is flexible to the extent that items such as cinnamon rolls, coffee cakes of all varieties, and raisin bread can be made successfully. At least one baker has quite a production of zwieback using this type of machine.

A type of Danish pastry can also be made through this extrusion method without the rolling-in process normally used in making this product. This is accomplished by mixing a dough in the clean-up stage and adding a quantity of high melting point flake type shortening and mixing only 1 min. This dough is then given normal floor time and extruded in the normal manner. The flakes of hard fat melt during the baking process and produce a crumb which is characteristic of a Dan'sh product.

I have seen this machine produce over 30,000 cinnamon rolls an hour and also on several instances 3,000 coffee cakes an hour. This, of course, was accomplished with the aid of conveyors whereby the pans used were conveyed to this machine, then filled with dough pieces and manually placed on racks for proofing. After baking, the rolls or coffee cakes were depanned onto a conveyor for cooling purposes and the pans also returned to the make-up unit by means of a conveyor. An icing unit is inserted in the conveyor line at the discharge end of the sweet goods cooling unit and after icing they are conveyed to the wrapping machine and on to the distribution point.

The employment of automation in cookie making has been known for

years. However, in the past decade, with the employment of very few trained personnel, many hundreds of pounds could be produced hourly if not too much variety was expected each working day. This is accomplished by the employment of a large wire cut machine which deposits from 12 to 24 cookies at one time (amount depending upon type cookie) onto a steel band which travels through a tunnel type oven. Variable speeds and different baking temperatures are employed depending upon the type cookies being manufactured. At the discharge end of this oven a scraper bar is used to remove the cookies from the baking band and onto a mesh type conveyor belt. This conveyor belt is usually overhead and employed for the cooling process. At the end of this conveyor there are usually guides which channel the cookies into a stacking arrangement and then they are automatically boxed or packaged. This arrangement can be employed, however, on a smaller scale in a retail bakery, especially one with multiple outlets. Of course, the employment of a tunnel

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**BEST QUALITY MICHIGAN  
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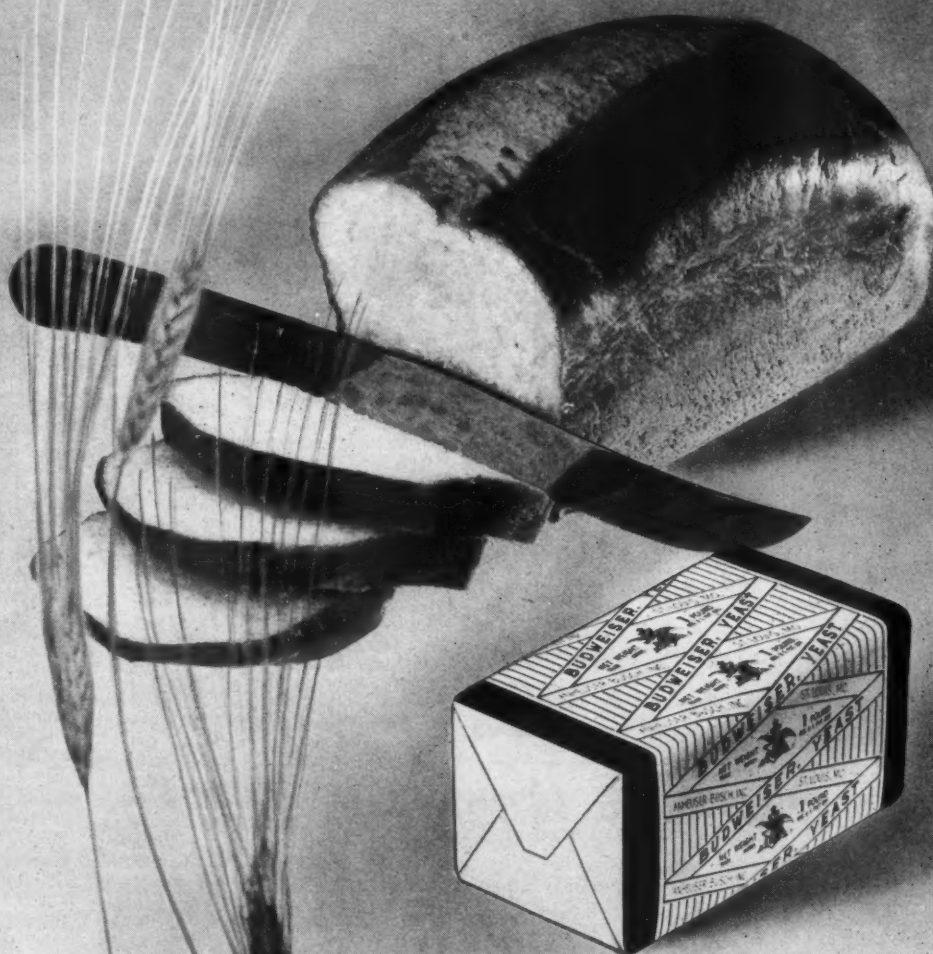
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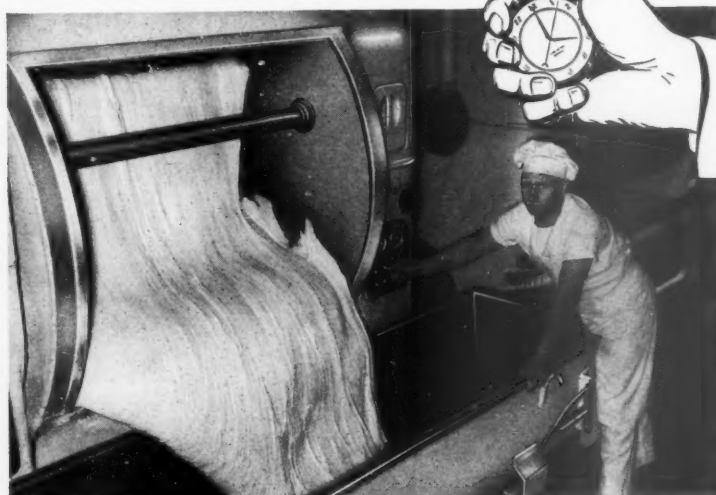


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Eliminate split-second mixing time...



## use **BAY STATE** "Quality Controlled" Flour

Wide mixing tolerance is inherent in Bay State "Quality Controlled" Flours. Without split-second timing, you obtain the utmost in loaf volume, grain and body. Try Bay State Flour with assured mixing tolerance and see the difference!

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CAPACITY 20,000 CWTs.

## 1957 SALES OF BAKERY PRODUCTS STORES SHOW \$63 MILLION INCREASE OVER 1956

WASHINGTON—Dollar volume sales by bakery products stores in the U.S. for the year 1957 totaled \$925 million compared with \$862 million in 1956, an increase of approximately \$63 million. Substantial increases over 1956 were made in every month of 1957 excepting February, when the total dollar volume was the same in both years, according to a retail trade report compiled by the Bureau of the Census, U.S. Department of Commerce. Month by month gains in 1957 ranged from as low as \$1 million in January up to as much as \$9 million in October. Increases for each of the months of April, August and November of 1957 amounted to approximately \$8 million. Dollar volume sales for June rose \$7 million over June of the earlier year; May and July sales each increased \$6 million; September and December each showed increases of \$4 million over the same months of 1956. In both years the traditional sales peak was reached in the final period. Sales for December, 1957, totaled \$88 million, compared with \$84 million in December, 1956. Sales for 1957 reached the lowest point of the year during February (\$68 million). Sales for 1956 reached the lowest point in July (\$65 million). On a percentage basis, the total increase for 1957 amounted to 7%. December sales increased 5% over November and over December, 1956.

type oven would be foolhardy unless production would warrant it.

In the automation of biscuits I would like to refer to an item produced to a great extent throughout the New England states, namely the English muffin. The automation of this item has reduced the production time to approximately 16 min. This has been accomplished through the employment of specialized equipment whereby the dough is scaled on a regular roll divider and rounder, and conveyed to a revolving table containing a generous amount of corn meal. From there the dough pieces are placed directly into cups on travelling plates which are then conveyed through a proofing chamber which gives the dough pieces approximately 6½ min. proofing time. They then continue directly into the grilling or baking chamber and are subjected to approximately 4½ min. grilling for each side of the muffin. After being discharged from the oven they are deposited automatically on a conveyor which carries the muffins through the cooling process and by gravity directly into the packaging machine. This is a vast improvement over the old method of manually grilling the muffin in individual rings.

The making of pies on large scale production has been automated to the extent whereby the pie dough, both top and bottom crusts, is automatically fed to the pie dough sheeters and forced automatically, in the instance of the bottom crust, directly into the pan. The pan is then conveyed under automatic fillers which are adjusted to deliver a given weight of filling. The pie then moves on and the edge of the crust is automatically washed by a series of revolving brushes. The top crust after being automatically rolled and placed on the pie is then rimmed and automatically sprayed with a wash. The pie is then conveyed directly to the oven where it is automatically placed on the baking trays by means of a pusher bar. After the completion of the baking period the pie is cooled through the cooling unit. The pie is discharged from the cooler directly to the packaging machine and automatically conveyed from the packaging machine to the distribution room. In the instances of the small individual pies we can even go a step further whereby the aluminum foil used for the pies is automatically stamped from a continuous band of this metal and then follows the aforementioned production of pie making.

### Utilize Principle

In conclusion, some of these methods, on large scale production, are not directly applicable to retail or multiple retail operation. However,

the principle can be utilized with adaptations to the extent that whether you are a retail or a large production wholesale baker, automation can be adapted to your particular operation and would lend itself to continuous daily uniformity of merchandise without jeopardizing the quality of your product.

—BREAD IS THE STAFF OF LIFE—

## Wisconsin Bakers See Film, Discuss Liquid Sweeteners

MILWAUKEE—Larry G. Trempe and Al Brunlieb, A. E. Staley Manufacturing Co., presented a film, "Uses of Liquid Sweeteners in Fermented Doughs," at the February meeting of the Wisconsin Bakers Production Club. Their presentation included appropriate commentary and the answering of questions relative to the installation costs of liquid sweetener equipment.

The meeting included a discussion of the new lucite stop plates in use on cross grain moulders and the practicality of such plates relative to conventional ones now in general use.

Considerable discussion was generated when the question was posed, "Is a company privileged to use 'up-printed' bread wrappers bearing the imprint, or union label, of a specific local if employees of that local have voted to affiliate with a new union?" The question brought out differences of opinion on the subject.

The next meeting will be held on March 17, at which time it is expected reports will be given by delegates to the American Society of Bakery Engineers meeting. ASBE delegates are: Kenneth Ford, Brownberry Ovens, Oconomowoc; Kenneth Roberts, Wil-Kil, Inc., Milwaukee; Ted Cox, the Kroger Co., Madison; Jack Guess, Kohl's Bakery, Milwaukee; L. P. Kenney, the L. P. Kenney Co., Milwaukee; Larry Rudd, Gardner Baking Co., Madison; and Ed Alesch, Gardner Baking Co.

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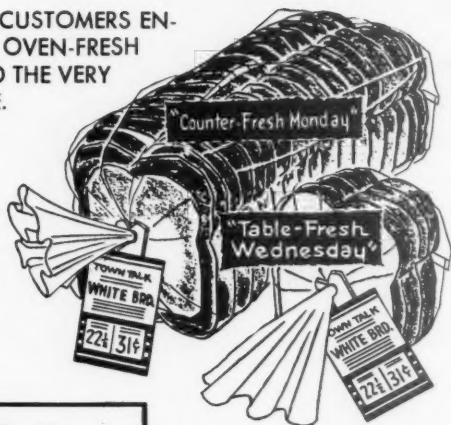
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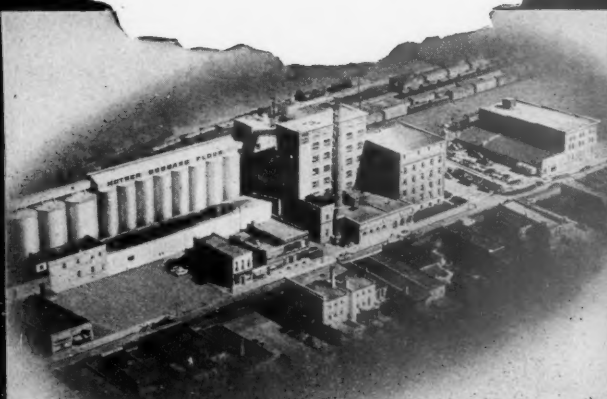
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IT TAKES JUST A TWIST OF THE BAG NECK AND A SNAP OF THE FINGERS TO OPEN OR CLOSE ANY KWIK LOK'D PACKAGE. BREAD THAT IS "OVEN FRESH" MONDAY IS "TABLE FRESH" WEDNESDAY.

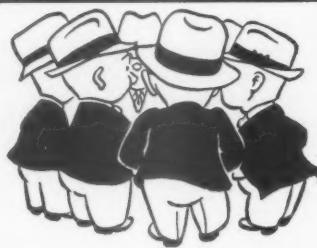
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## TRADE PULSE

● **Michael D. Mullin** has been appointed director of bulk product sales of Corn Products Refining Co. The announcement was made by **Alexander N. McFarlane**, vice president and general sales manager. Mr. Mullin succeeds **Edward W. Schmitt**, who has retired after 46 years of service. A 1934 graduate of Iowa State College, where he received a degree in chemical engineering, Mr. Mullin has held a variety of sales and marketing positions in his 24-year career with the company. Prior to his new appointment he served as assistant to the general sales manager, and from 1954 to 1957 was manager of the Milwaukee branch sales office. **Thomas A. Bruce** has been appointed by Corn Products as assistant to the general sales manager, succeeding Mr. Mullin. Mr. Bruce, a graduate of Bradley University, has spent 40 years with Corn Products, having started as a 15-year-old student. His previous assignments have been in manufacturing and research, as well as sales. Until his new appointment he served as assistant bulk sales manager.

● **William A. Mickey** has been promoted to chief engineer, baking equipment, of Read Standard Division, Capitol Products Corp., York, Pa., **William J. Strandwitz, Jr.**, executive officer, has announced. Mr. Mickey has been assistant chief engineer of Read Standard since 1945. He has been associated with bakery and chemical equipment since 1922. His new post has been created in keeping with the division's current expansion in baking equipment research and development. Mr. Mickey holds a degree in electrical engineering from the L. I. Cooke School, Chicago, and is a registered professional engineer. During World War II he served as manager and priority specialist in the local office of the War Production Board. **William W. Lauer** has been appointed director of purchases for Read Standard. Mr. Lauer was previously with the industrial division of Borg-Warner Corp. **C. W. Noss** continues with his present duties as purchasing agent for Read Standard.

● Promotion of **James V. Melton** to vice president of Pollock Paper Corp. was announced in Dallas by **Leslie L. Jacobs**, executive vice president. A veteran of more than 25 years with Pollock, Mr. Melton has for the past 15 years served as sales director for the bakery, frozen food and specialty packaging divisions. He joined Pollock as a trainee following graduation from Southern Methodist University in 1932 with degrees in electrical and mechanical engineering. Except for wartime service in Washington, he has been there since, working in all departments, including production, product development and sales.

● **Joseph Creed**, American Bakers Assn., Washington, has been elected treasurer of the Private Truck Council of America. Election of Mr. Creed, and others, occurred at the council's 19th annual convention held recently in Philadelphia.

● **Leo W. Bayles**, president of Drake Bakeries of New York City, a subsidiary of the Borden Co., has been elected a vice president of Borden's.

● **Leslie L. Jacobs**, executive vice president of Pollock Paper Corp., has announced that **J. D. Craven** has been promoted to manager of plant operations for the waxed paper, cellophane and label divisions. Mr. Craven recently completed 20 years of service with Pollock, and for the last 10 years has been manager of Pollock's flexible packaging plants in Dallas and Houston, Texas. Mr. Craven was graduated from Texas A&M in 1937, and shortly thereafter was employed at Pollock's Dallas plant as a trainee. After broad experience in all departments, he was appointed assistant manager of the Dallas and Houston plants in 1942, and manager in 1947. **Lloyd B. Blackburn** will succeed Mr. Craven as manager at Dallas and Houston. Mr. Blackburn attended Southern Methodist University, and started his career with Pollock as a trainee while still attending college. He served as assistant manager of the Dallas and Houston plants under Mr. Craven's management.

● The election of **Carter L. Burgess** as president of American Machine & Foundry Co. was announced by **Morehead Patterson**, chairman of the board and chief executive officer. Mr. Burgess was formerly president of Trans World Airlines. From 1954 to 1956, he served as assistant secretary of defense for manpower and personnel. For his services he received the Defense Department's highest civilian award, the Certificate of Appreciation. Prior to his appointment as assistant secretary of defense, Mr. Burgess was assistant to the president of the University of South Carolina. He served from 1947 to 1953 as assistant to the president and director of administration of the General Aniline and Film Corp.

*Super Chief*

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OTS



*proving that old habits  
can be costly*



## Production Men See Time, Labor Saving Demonstrations

PITTSBURGH—Approximately 125 members of the Greater Pittsburgh Production Men's Club participated in a full and varied program of equipment demonstrations and actual baking techniques recently at the South Vocational High School here. Edward Swain, Grady Bakery, New Kensington, president, presided.

John P. Byrnes, Byrnes & Keifer

Co., and Rodney Danko, Danko Bakery, gave a talk and demonstration titled "How to Get Ahead" and demonstrated methods of cutting time and labor costs by the use of moulders and sheeters.

Louis Laufer, also of Byrnes & Keifer, demonstrated the use of an electric filling machine for doughnuts, cream puffs, coffee cake and other baked foods. Along with both demonstrations there was an elaborate display of baked foods, which were later sampled.

James McNally, McNally Bakery,

demonstrated the procedure for making mint wafers in a variety of colors and shapes by the use of rubber molds. Mr. McNally maintained that the wafers are "easy to make, pleasing to his customers and that they mean good profits for bakers."

Members were informed by John Richey, Richey Bakery, that at least 100 Tri-State bakers plan to board the special railroad car bound for the Associated Retail Bakers of America convention to be held in Chicago on April 27-29.



Edward R. Johnson

## Pie Firm Names Edward Johnson Sales Manager

CHARLESTON, W. VA.—Edward R. Johnson, executive secretary of the West Virginia Bakers Assn. for the past eight years, has become general sales manager for the Griffin Pie Co.

For a limited time Mr. Johnson will act in an advisory capacity to the West Virginia association and will manage its summer convention at White Sulphur Springs.

Mr. Johnson attended West Virginia University and worked for the Du Pont Co. before becoming secretary for West Virginia bakers, and has written a newspaper column for the past 10 years.

The Griffin company, a wholesale baking firm, has plants in West Virginia, Kentucky, Tennessee, Mississippi and Florida.

Mr. Johnson is widely known in the baking industry for his promotional efforts, having created the bread slogan "Better Health Begins With Bread," which has been widely used in the industry. He won an achievement crown from the Royal Order of Loyal Loafers in 1956. He will continue to make his home in Charleston, W. Va.

Mrs. Ed Johnson, wife of the retiring secretary, has been employed temporarily as secretary of the West Virginia Bakers Assn.

—BREAD IS THE STAFF OF LIFE—

### SALES ARRANGEMENT

FRANKLIN PARK, ILL. — The Petersen Oven Co. has been granted an exclusive arrangement to sell industrial proof boxes and fermentation rooms throughout the U.S. This equipment is manufactured in Chicago under the firm name of Industrial Air Conditioning Systems, Inc.

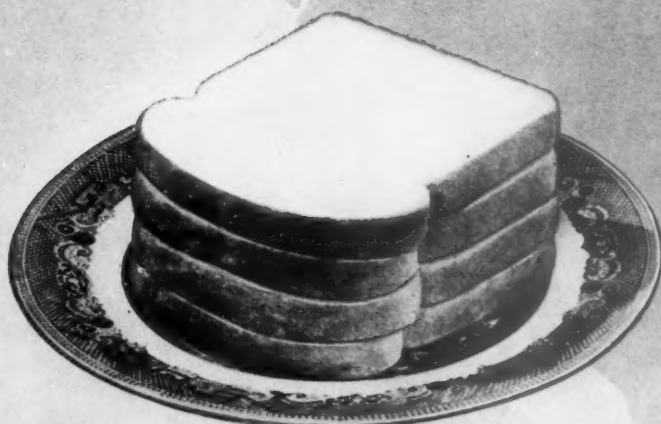
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Successors to JONATHAN HALE & SONS, Inc.  
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FROM OCEAN TO OCEAN  
IT'S WYTASE BREAD



Because it's ....  
**SOFTER  
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*Preferred* **WHITE BREAD**  
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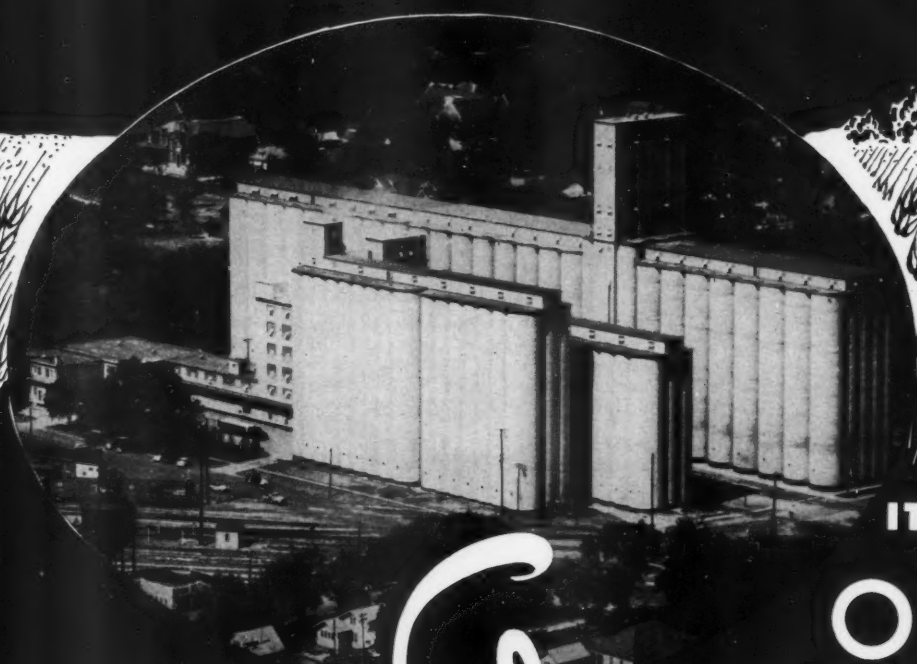
WYTASE is the registered trade mark of the J. R. Short Milling Company to designate its natural enzyme preparation for whitening and conditioning the dough.

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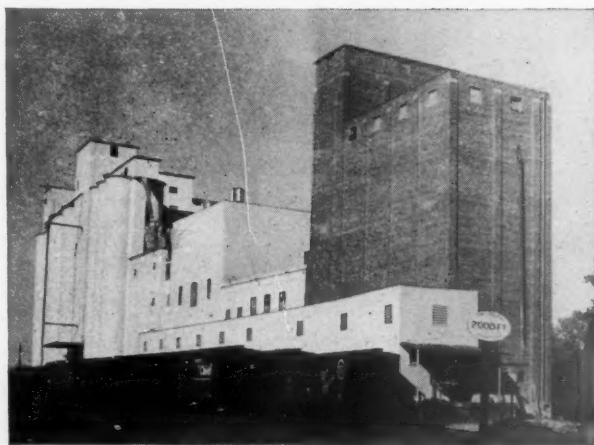


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STORAGE AND HANDLING FACILITIES TO REPLACE THE  
OLD SACKED STORAGE WAREHOUSES.

The WESTERN STAR MILL CO.  
SALINA, KANSAS



"BIG" PROMOTION—Jack Schafer, president of Schafer's Bakeries of Detroit, Michigan, at right, and Ted Lloyd, TV star "Sagebrush Shorty," pose at the base of the 25-ft. stove originally built for the Chicago World's Fair of 1893, and which Mr. Schafer has now acquired and put to use promoting his newest product, Kitchen Stove bread.

## Giant Range Used to Introduce New Schafer Loaf, "Kitchen Stove Bread"

DETROIT—Schafer's Bakeries has released its newest product, "Kitchen Stove Bread," the 20th new variety from the Schafer firm. Jack Schafer, president, has acquired a huge stove, a perfect replica of a turn-of-the-century kitchen range, to publicize the new loaf. The stove has been a Detroit landmark for more than half a century. Originally built for the Chicago World's Fair of 1893, it stands 25 ft. high, and is prominently located on Detroit's waterfront. Beside it has been placed a simulated loaf of Schafer's new bread. The giant stove has been equipped with a neon flame to remind the public that Schafer's breads are flame baked, an exclusive process.

"We couldn't have found a better symbol than the giant stove for our new bread," said Mr. Schafer. "It perfectly represents the flavor and texture of the new loaf, as well as our flame-baked process."

The formula for Kitchen Stove bread contains unbleached flour with the wheat germ added. Like all other Schafer breads it is flame baked in direct-fire ovens at Lansing, Mich.

### Recipe Developed

"We discovered a fine recipe for a bread of excellent texture and taste," Mr. Schafer said. "That was almost a year ago. It's taken all the time since, with experimental and trial bakings, before we could adapt the formula to commercial methods."

"When it comes to exploitation and salesmanship, I believe that the baking industry is just like any other business," said Mr. Schafer. "It takes solid merchandising and showmanship to move products these days. The independent baker must constantly make that extra effort to keep his share of the market and steadily show some gain."

This attitude toward merchandising, and a regular program of new product development, are important phases of the Schafer operation. The original 14 routes operated by the company have developed into more than 200 today, with distribution throughout Michigan.

Mr. Schafer has patented the formula and copyrighted trade marks for the new Kitchen Stove bread. Tentative plans are being made to franchise the package nationally.

Mr. Schafer has long been associ-

ated with unlimited hydroplane racing. His boats, all called "Such Crust," have gained fame in competition across the country, including such noted races as the Gold Cup and the President's Cup. Besides gathering trophies, the boats have contributed much toward the promotion of Schafer Bakeries.

—BREAD IS THE STAFF OF LIFE—

## South Dakota Bakers

SIOUX FALLS, S.D.—The South Dakota Bakers Assn. will hold its 1958 convention April 12 and 13 in Sioux Falls.

Headquarters will be in the American Legion clubrooms, according to an announcement made by Dale Olson, secretary of the association.

A banquet and dance will open activities on Saturday, April 12. The program, which will take place the following day, will include bakery demonstrations, a panel discussion, talks on merchandising and advertising and a style show featuring uniforms for bakery personnel.

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## Worth Looking Into



### New Products New Services New Literature

This reader service department announces the development of new and improved products, new services and new literature offered by manufacturers and suppliers. Claims made in this department are those of the firm concerned. Use the accompanying coupon to obtain the desired information.

#### No. 4090—Foil Wrap For Bakers

The Reynolds Metals Co. is offering a new aluminum foil wrap which it says is competitive in price with many conventional wraps. The firm claims that the new "Wrapseal" foil is able to offer the protective and merchandising qualities of a foil wrap on a price basis competitive with transparent film. It is a heat-sealable lamination of foil, paper and wax, perforated by a new skip-scoring method to assure consistent sealing of end folds where foil-to-foil contact is made. For details mark No. 4090 on the coupon elsewhere on these pages and send it in.

#### No. 4085—Baking Book Published

"Let's Talk Baking," by Harry N. Brown and Fred DeArmond, has been written for management and others in the bakery, who are connected in some way with sales. The book is directed particularly to the newer developments in marketing at the

wholesale and retail levels. It also traces the history of flour and bread making from primitive times to the present and, in the final chapter, makes some forecasts about the baking industry of the future. The book, published by the Mycroft Press, covers such subjects as food faddism, problems of competition, advertising, public relations, variety baked goods, and the story of flour milling. Not a large book, it is tightly written within 138 pages. The authors make some positive statements about the actual strength of brand loyalty when put to the test, high distribution costs, self-service vs. the retail bakery clerk, and adequate sales supervision. Details about obtaining "Let's Talk Baking" may be had by mailing the coupon to this publication.

#### No. 4093—Screen For Sifting

The J. H. Day Co. is making available to processors of sugar and powdered milk a specially designed power screen for products that have a tendency to caramelize or gum up



in reciprocating sifters. It can be mounted for floor discharge arrangements, as illustrated, or on longer pipe legs to fit over various mixing bowls or shipping drums, and is designed and built to meet sanitation requirements, with tubular construction to eliminate crevices and cracks. More information on the power screen may be obtained simply by marking No. 4093 and sending the coupon.

#### No. 4092—Display For Bread

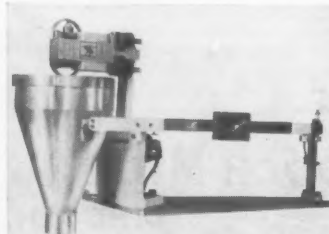
A bread display consisting of a four-tiered adjustable aluminum rack to represent shelves and 396 wooden blocks in 12 colors to represent loaves of bread is now available from H. A. Bacon & Co. The miniature demonstrator enables an operator to reproduce a bread display, even to show different arrangements, without using actual loaves. The rack is adjustable and the colored blocks are available in three sizes. The unit is portable. Inquire for details by sending the coupon, with No. 4092 checked, to this publication.

#### 4097—Baking Promotion

Messing and Pechter Bakeries, Inc., has adopted a promotion that may be of interest to other bakers. The firm includes a sample package of jelly in some of its product packages, giving the consumer the feeling of getting something free. The transparent jelly packages, imprinted with the bakery's name, are available for distribution anywhere in the U.S. by Package Consultants, Inc. For more information check No. 4097 on the coupon and mail to this magazine.

#### No. 4094—Liquid Weighing Unit

Glengarry Processes, Inc., is offering a new device for the accurate measurement of liquids in cases where it is more advantageous to weigh materials than to control the volume. The device consists of a weigh tank mounted on a beam. Above the tank is a pneumatically actuated bulk and trim flow valve connected to the user's supply tank by silicone or other flexible tubing. The liquid is automatically allowed to flow into the tank at a high rate of speed until the designated weight is near, at which time the flow is automatically diminished to obtain extremely accurate final weight. When the proper weight is reached, the flow valve is positively closed. A detailed explanation of the new de-



GLENGARRY AUTOMATIC LIQUID WEIGHER

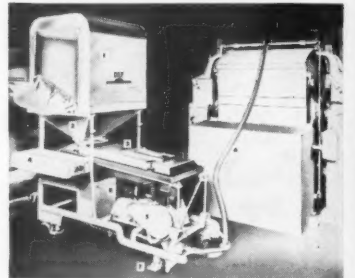
vice is available from the manufacturer. Simply put a check mark before No. 4094 on the coupon, mail to this publication, and details will be sent.

#### No. 4088—Special Packaging Film

A special packaging film for hand wrapping of frozen foods is now available from the Goodyear Tire & Rubber Co. Known as Videne TC, the new film is being offered as an overwrap, suitable for bundling and banding. The company claims that Videne TC is the first wrap with sufficient rigidity and dimensional stability to be run on commercially available high speed, automatic packaging machines. The film has a window-like clarity and can be heat-sealed and shrunk up to 50% of its original area. Considerably more information about Videne TC is being offered. Designate No. 4088 and send the coupon to this magazine.

#### No. 4095—Special Sifting Unit

The J. H. Day Co. offers a special unit for sifting and handling various materials, the new "Ro-Ball Airmatic," compact, self-contained mobile unit that, due to its unique construction, is said to offer appreciable handling and production savings. It



can sift and airmatically deliver aerated flour or materials of similar consistency to mixers or storage bins. It serves as a dump bin, a ro-ball sifter and an airmatic conveyor. One push button operates the entire system. It incorporates these features as shown in the illustration. For details, write to this publication, requesting No. 4095.

#### No. 4084—Salvage Paper Bags

Empty sugar or flour bags may be salvaged profitably, according to B. W. Dyer & Co., sugar economists and brokers. The Dyer firm has just published a simple, diagrammatic little pamphlet showing exactly how to remove the sealing thread from paper bags to prevent damaging or slashing. The bags, in turn, may be salvaged and resold. Copies of the pamphlet are available while they last. Simply check No. 4084 on the coupon and send it to this publication.

#### No. 4083—New Ribbed Pan Guard

A new construction feature, said to greatly increase pan strength, is now available on bread and pullman pans made by Chicago Metallic Mfg. Co. Baking pans with the new feature, called "Pan Gard," are made of "ribbed" metal. The new Pan Gard ribbed metal construction reinforces the rim, sides, and bottoms of the pans, making them considerably stronger than pans made of smooth metal. The increased strength, in turn, results in longer shape retention and life for the pans, more uni-

Send me information on the items marked:

- |  |   |
|--|---|
| <input type="checkbox"/> No. 4081—Bread Mone.          | <input type="checkbox"/> No. 4090—Foil Wrap.        |
| <input type="checkbox"/> No. 4082—Pan Guard.           | <input type="checkbox"/> No. 4092—Bread Display.    |
| <input type="checkbox"/> No. 4084—Paper Bags.          | <input type="checkbox"/> No. 4093—Sifting Screen.   |
| <input type="checkbox"/> No. 4085—Baking Book.         | <input type="checkbox"/> No. 4094—Weighing Unit.    |
| <input type="checkbox"/> No. 4086—Pie Filler.          | <input type="checkbox"/> No. 4095—Sifting Unit.     |
| <input type="checkbox"/> No. 4087—Dough Mixer.         | <input type="checkbox"/> No. 4096—Fuel Meter.       |
| <input type="checkbox"/> No. 4088—Packaging Film.      | <input type="checkbox"/> No. 4097—Baking Promotion. |
| <input type="checkbox"/> No. 4089—Aluminum Containers. |   |

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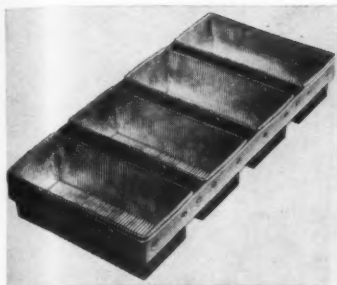
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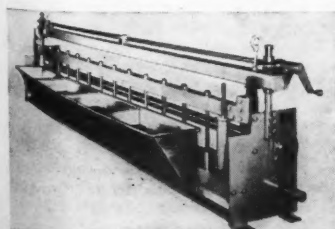
form bakes, and better loaf sidewalls. The stronger pans and resulting shape retention mean fewer crumbles and better releases for a longer time. The manufacturer says that, in many cases, Pan Gard will eliminate the need for perforations in sidewalls or bottoms of pans, and will thereby eliminate cupping or tunnels on bottoms of loaves. There is a nominal charge for the Pan Gard as an optional feature on the firm's bread and pullman pans. For more information, mail to this magazine the coupon found elsewhere on this page, making certain that a check mark is placed before No. 4083.

### No. 4096—Fuel Intake Meter

A fuel intake meter which is supposed to give fleet owners a record of fuel used within an accuracy of 1% is being marketed by the Sentinel Products Corp. The meter is said to be tamper proof from the intake filter to the carburetor, with all joints between the meter and fuel tanks self-locking and leak proof. The company is offering the meter as an answer to padding of fuel bills by drivers and "kick back" arrangements by filling station operators whereby an excessive fuel billing is made to the truck owner and the driver and station operator split the overage in merchandise or cash. (An article on fuel bill padding was printed in a recent issue of Life Magazine, with actual photographs of truck drivers and filling station operators bilking unwary owners.) The fuel intake meter is being manufactured by Reliance Engineering and Manufacturing Corp., a wholly-owned subsidiary of Frigikar Corp. The cost of a meter, complete with all fittings, is \$125. Details are available by simply making a check mark before No. 4096 and sending the coupon to this magazine.

### No. 4086—Pie Filler Depositor

Medium and large-size bakeries can benefit from a new Hope unit, Type 11-A, pie filler depositor, according to the manufacturer, Hope Machine Co. of Philadelphia. Described as a real labor saver, the machine is designed for filling open top pies. It is made to span a tunnel type oven and comes equipped with an individual drive and single revolution clutch to time its operation with the oven feeder bar. Each deposit is individually measured by pistons and cylinders which can be adjusted for different quantities. The design also includes eye bolts for attaching to



overhead trolleys and hoisting screws for easy removal from the oven. Hope states that the model is supplied from 5 to 12 cylinders wide to fit any width oven.

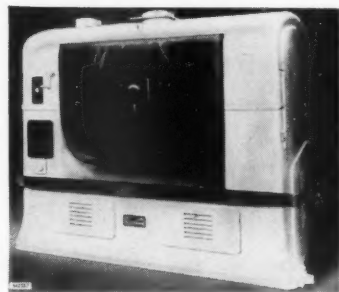
For further information check No. 4086 on the coupon, clip and mail.

### No. 4081—Band Hone For Bread Slicing

The Hansaloy Mfg. Co. has been testing a new bread slicing band hone in production plants for approximately 12 months and claims that results have been exceptional. The hone can be installed in any two-drum slicer. When installed it becomes a permanent part of the slicer and is operated by simply pulling the knobs to starting position. It does not require a skilled operator, say the manufacturers. The honing stones are replaceable and are positioned at the correct angle to assure precision honing. The new "Precision Hansaloy Honing" comes complete with brackets and instructions for easy installation. For details simply clip the coupon elsewhere on these pages, check No. 4081, and mail it to this publication.

### No. 4087—High Speed Dough Mixer

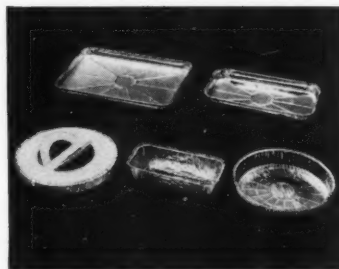
The high speed sanitary dough mixer shown here has just been introduced by Read Standard Division of Capitol Products Corp. for use in the baking industry. Called the Super-D, the new mixer is designed for faster dough mixing with maximum gluten development. It uses a three-bar agitator, and each bar is located at a different distance from the center shaft. This assures constantly changing contact with the dough mass. It revolves at top speed at 80



RPM in a stainless steel mixing bowl. Patented Readco compressed air seals, complete with built-in air compressor, eliminate the need for packing. The hood of the Super-D is provided with Readco's exclusive sanitary-type water inlet. High speed Super-D mixers are available in capacities of 800, 1,000, 1,300, and 1,600 lb. of finished dough. More information about the dough mixer is available by checking No. 4087 on the coupon and mailing it to this publication.

### No. 4089—Aluminum Foil Containers

Chicago Metallic Mfg. Co.'s foil division announces that five new aluminum foil pans have been added to its line of foil containers for bakeries. The new foil pans include a round cake or coffee cake pan measuring 8½ in. by 1½ in. that fits six to a standard 18-in. x 26-in. bun pan; a new loaf pan measuring 4½ in. by 8 in. by 1½ in. deep, for date-nut and banana breads or small loaf cakes; a new shallow foil tray measuring 11½ in. by 7½ in. for over-wrapped Danish or sweet rolls or pizza; a medium-size foil tray measuring 10½ in. by 5½ in. by ½ in.



deep, for Danish, edelweiss, and strudels; and a special 8½ in. diameter vertical flange pie plate for whipped cream, meringue, or Boston cream pies. This pie plate takes a window handle cover ideal for self-service supermarket shopping. For more information check No. 4089 and mail to this publication.

### Also Available

The following new products have been described in previous issues and information about them may still be obtained by jotting the appropriate number on the coupon and forwarding it to this magazine.

No. 4049—Cake pan coater, J. H. Day Co.

No. 4050—Rectangular cake pan, lock Paper Corp.

No. 4051—Salt dispensing bin, Morton Salt Co.

No. 4053—Sweet Goods Flavoring, International Bakers Service, Inc.

No. 4054—Starch for bakers, A. E. Staley Mfg. Co.

No. 4055—Oven Shut Off, the Partlow Corp.

No. 4056—Pie thickener, National Starch Products.

No. 4057—Steam cleaner, Pantek Mfg. Corp.

No. 4058—Polymer-coated cellophane, Du Pont Co.

No. 4059—New batching scale, Detecto Scales, Inc.

No. 4060—New foil coating, Ekco-Alcoa Containers, Inc.

No. 4061—Bulletin on airstream conveyors, the Dracco Corp.

No. 4062—Modified starch, Morningstar, Nicol, Inc.

No. 4063—Dry powdered flavors, Syntomatic Corp.

No. 4064—Book on freezing and preservation of foods, AVI Publishing Co.

No. 4065—Mold inhibitor, S. Gumpert Co.

No. 4066—Display Cooler, Norlake.

No. 4067—New mixer, J. H. Day Co.

No. 4068—Conveyor tape, Joclin Manufacturing Co.

No. 4071—New bread label, Pollock Paper Corp.

No. 5777—Drum handler, Hamilton Equipment Co., Inc.

No. 5924—Engineering report on mixing, Rietz Manufacturing Co.

No. 6660—Open and closed-head steel drums, Vulcan Containers, Inc.

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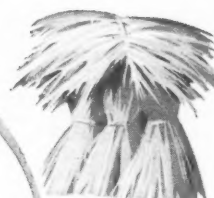
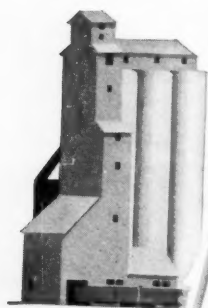
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**PACKAGING WINNERS**—Winners in a national contest sponsored by the Bakery Packaging Council to determine the best package in several varieties of bakery foods are shown above, following a Chicago award luncheon. The packages were selected by industry judges from the thousands of packages in the baked foods display of the American Society of Bakery Engineers. Left to right are Edward Harris, Emil's Donut Corp., Chicago; Jack Kollman, Kitchens of Sara Lee, Chicago; Herman Dressel, Dressel's Bakeries, Chicago; Joseph W. Hatch, Jr., Colonial Stores, Inc., Atlanta, Ga.; Joseph Baldrige, Baldrige Bakery, Lubbock, Texas, and Merrill O. Maughan, executive secretary of the Bakery Packaging Council, accepting an award for the Barnesboro (Pa.) Bakery.

## Bakery Packaging Council Selects Winners in Six Product Fields

CHICAGO—Six baking industry packages, chosen from thousands exhibited here recently, were selected by the Bakery Packaging Council, Chicago, to receive an "award of excellence." At a luncheon at the Edgewater Beach Hotel March 5, representatives of the baking firms saw their winning packages displayed and heard judges tell why they won.

Winners in the categories were:

Pie package: Dressel Bakeries, Chicago, award to Herman Dressel.

Cake package: Kitchens of Sara Lee, Chicago, award to Jack Killman for Charles Lubin, president.

Doughnut package: Emil's Donut Corp., Chicago, award to Edward Harris.

Hamburger bun package: Baldrige Bakery, Lubbock, Texas, award to Joseph Baldrige.

Wiener roll package: Barnesboro (Pa.) Bakery. Clifford Webster, Bakers Review, New York, accepted the award on behalf of the bakery.

Brown 'n Serve roll package: Colonial Stores, Inc., Atlanta, Ga., award to Joseph W. Hatch, Jr.

The jury included Charles J. Regan, Interstate Bakeries Corp., Chicago, chairman; Dr. Paul Flick,

Northwestern University, Evanston, Ill.; William Grewe, J. T. Shufitowski Co., Chicago, chairman of the baked foods display of the American Society of Bakery Engineers, from which the winning packages were selected; Mary K. Moore, American Institute of Baking, Chicago; Dennis Triplett, Penson-Tuttle designers, Chicago, and Walter Warrick, J. R. Short Milling Co., Chicago.

The packages were judged on two main categories of "consumer impact" and "retailer impact," with each receiving equal weight. In the consumer category, the packages were judged on appetite appeal, informative value, product quality appeal, and whether they satisfied the "easy to handle" requirement.

Retailer impact was determined by brand identity, protective qualities, stacking ability, and whether the product was contained in a package of standard size, as recommended by the Bakery Packaging Council.

Merrill O. Maughan, executive secretary of the Bakery Packaging Council, Chicago, detailed the projects of the organization now under way, with all aimed at more effective packaging of bakery foods:

1. Simplification of package sizes.
2. Package design improvement.
3. Uniform location of spot for price marking.
4. Selection each year of "merchandising statesman."
5. Bakery package judging, with "awards of excellence" being presented to winners annually.

In the absence of the council chairman, George Graf, Quality Bakers of America Cooperative, Inc., New York, the chairman of the luncheon meeting was Frank W. Cooley, editor of The American Baker magazine.

—BREAD IS THE STAFF OF LIFE—

### PILLSBURY OFFICE MOVES

CHICAGO—The district sales office of the bakery products division of Pillsbury Mills, Inc., has been moved from 20 N. Wacker Drive, Chicago, to the company's new offices in Des Plaines, Ill. C. D. Sanderson is manager of the Chicago district which services Illinois, Indiana, Kentucky, the lower Michigan peninsula, eastern Iowa and eastern Missouri.

## BISSC Reviews Progress, Honors Retiring Chairman

CHICAGO—The Baking Industry Sanitation Standards Committee met at the Edgewater Beach Hotel Feb. 23 and March 1 to review its progress and to commend some of its outstanding members for leadership and service, along with the election of a new chairman.

J. Lloyd Barron, who is retiring as chairman after five years, was presented an inscribed watch as a token of appreciation. The presentation was made by A. J. Faulhaber, vice chairman. In accepting the recognition accorded him, Mr. Barron summarized BISSC progress. He expressed satisfaction about industry support being given BISSC projects, and reminded members that it will require time for the impact of the work to become fully noticeable. He urged more publicizing of BISSC work, and advised patience and fortitude in pursuing its goals.

In other business, Robert S. Taggart, sanitary engineer for the National Biscuit Co., New York, was elected BISSC chairman. Mr. Taggart is a graduate of Cornell University and has served as sanitary engineer with the Westchester (New York) County Department of Health and the New York State Health Department. Mr. Taggart was helpful in the formation of BISSC and has contributed to the development of a number of its standards.

Benson Littman, vice president of Ekco Products Co., Chicago, was appointed as a member of the group's finance committee, replacing Louis E. Caster, Keig-Stevens Baking Co., Rockford, Ill.

It was reported that 12 standards have been carefully developed, approved and published to date. These are 1. Flour Handling Equipment, 2. Dough Troughs, 3. Mechanical Proofers, 4. Pan, Rack and Utensil Washers and Industrial Sinks, 5. Cake Depositors, Fillers and Icing Machines, 6. Horizontal Mixers and Vertical Mixers, 7. Conveyors, 8. Dividers, Rounders and Bun Machines, 9. Bread Moulders, 10. Atmospheric Type Ingredient Water Coolers and Ice Makers, 11. Proofing and Fermentation Rooms and Coolers, 12. Coating Equipment.

Announcement was made of plans to develop standards for several other types of ingredients and equipment, some of which will be published soon.

—BREAD IS THE STAFF OF LIFE—

## Alphonse G. Schreck, Technologist, Dies

CHICAGO—Alphonse G. Schreck, retired vice president of J. E. Siebel Sons' Co., Chicago, and dean of the Siebel Institute of Technology, died recently at the age of 68.

Prior to retirement, Mr. Schreck was one of the best known brewing technologists in the industry. His entire career was spent with the Siebel organization, which he joined in 1906 at the age of 15. He served as a laboratory assistant to the founder, Dr. J. E. Siebel.

For many years Mr. Schreck was active in the affairs of the American Society of Bakery Engineers, American Association of Cereal Chemists, Master Brewers Association of America, American Society of Brewing Chemists, and the National Association of Practical Refrigeration Engineers.



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**AWARD**—At a luncheon meeting of the Bakery Packaging Council at the Edgewater Beach Hotel, Chicago, six bakeries were given "Awards of Excellence" for bakery packages. Accepting the doughnut package award is (right) Edward Harris for Emil's Donut Corp., Chicago. At the left is Frank W. Cooley, editor of The American Baker, who acted as chairman of the meeting in the absence of George Graf, Quality Bakers of America Cooperative, Inc., New York.



**TRI-STATE BAKERS "IN ACTION"**—In the picture at the left William L. Wolf, Wolf's Bakery, Inc., Lafayette, La., takes time out from his duties as Tri-State president to discuss baking with another executive, E. E. Kelley, Jr., Butter Krust Bakeries, Inc., Lakeland, Fla., president of the American Bakers Assn. Ivan Hill, executive vice president of Cunningham & Walsh, Inc., Chicago, and Benson Skelton, president of the Southern Bakers Assn., Atlanta (second picture from the left) scan the address on "Pride and Profits" which Mr. Hill delivered to Tri-State bakers at their annual convention. The large group (third picture from the left) is witnessing the initiation of Dudley McFadden, Chicago, public relations director of the Bakers of America Pro-

gram of ABA, as an honorary Confederate. Mr. McFadden was presented a miniature Confederate flag and a grey army cap by President Wolf. In the picture, from the left, are Jerry Hudson, Memphis; Bob Morton, Jackson, Miss.; Mr. McFadden; Archie Johnston; President Wolf; SBA President Skelton; and R. Engelhardt, Columbus, Miss. At the far right Fred Pollman, Pollman's Bake Shop, Mobile, Ala., confers with Tom Scheuermann, field representative of the Associated Retail Bakers of America, Chicago. Mr. Scheuermann addressed the second general business session on the topic, "Let's Talk Cents." Mr. Pollman was elected vice president for Mississippi of the retail division.

## Merchandising Accented at Tri-State Bakers Meeting

NEW ORLEANS — Merchandising at both the wholesale and retail levels came in for considerable discussion at the recent convention of the Tri-State Bakers Assn. which was held here at the Monteleone Hotel. Attendance totaled more than 300, including 70 bakers who met opening day for the president's reception.

The featured speaker on merchandising was Ivan Hill, executive vice president of Cunningham and Walsh, Inc., Chicago. Mr. Hill's talk was on "Pride and Profits." Others on the program included John Tindall, Waxed Paper Merchandising Council, who explained the strategy in waging the "Battle of the Shelves"; E. E. Kelley, Jr., president of the American Bakers Assn. who urged bakers to better efforts, and Dudley E. McFadden, public relations director of the Bakers of America program. Tom Scheuermann, field representative of the Associated Retail Bakers of America, reviewed the work of ARBA; Leo Spath, Louisiana State Department of Health, spoke on labeling law requirements and misbranding. Andreas Reising, Sunrise Bakery, Inc., New Orleans, newly-elected head of the American Society of Bakery Engineers, paid tribute to the Tri-State Bakers Assn., its founders and promoters, noting that the 1958 meeting marked the organization's 25th anniversary.

### President Re-elected

William L. Wolf, Wolf's Bakery, Inc., Lafayette, La., was re-elected president. The following officers were also retained: Charles Maggio, Tasty Baking Co., Baton Rouge, La., board chairman; Tom Stevens, Home Baking Co., Birmingham, Ala., vice president for Alabama; Melvin C. Hebert, Calcasieu Baking Co., Lake Charles, La., vice president for Louisiana, and Sidney Baudier, Jr., New Orleans, secretary-treasurer. One new officer was chosen: Robert N. Morton, Colonial Baking Co., Jackson, Miss., vice president for Mississippi.

In the Tri-State retail division, Richard T. Parris, the Pastry Shop, West Monroe, La., was elected president. All other retail officers were re-elected: N. F. DeSalvo, DeSalvo Bakery, Harvey, La., board chairman; Larry J. Long, Long's Bakery, New Orleans, vice president for Louisiana, and Lou-

is Schweizer, Blue Ribbon Bakery, Hattiesburg, Miss., vice president for Mississippi.

In his talk on "Pride and Profits" Mr. Hill stated that the key words of the title, pride and profits, should be reflected first in the quality of the product offered and then in operating efficiency of the business—in advertising, packaging, wrapping, the manner in which trucks are painted and kept clean, the way in which the driver-salesmen walk into a store, and the manner in which the telephone operator answers callers. He proceeded to apply the factor of pride to bread sales, profits and supermarkets.

"If a wholesale baker offers no special service, has no special product quality, or if his bread is not well

advertised; if the consumer would just as soon have some other bread (perhaps the supermarket's own brand), then why should that store keep the baker's bread? The answer is clear—the chain or supermarket will add an advertised or service brand of bread if such action will hold its customers.

"As to the justification for a customer paying a higher price for the wholesaler's bread, there is one simple reason why he should pay the price. If the service brand is well advertised, well packaged and displayed, the consumer will believe it is better for her. Because of this belief it will even taste better and give her more satisfaction. I believe it is the advertising and product presentation which spell the difference, not the higher price.

### Justify Difference

"This psychological difference alone is not enough to justify optimism about the future, if the baker expects a fair profit. If there must be a dif-

ference in price between the chain's bread and that of the wholesaler, it must be enough to pay for good service, store advertising, a proper profit and the added cost of fine ingredients, and careful baking.

"There is still room for the wholesale baker to make good money because of population growth especially if he does a much better job with the smaller and medium-size stores, where there is room for improved service and display. And don't forget that freshness is still an important factor in bread," Mr. Hill concluded.

President Kelley of the ABA stressed that "there is a future for the individual in the baking industry," but he must discard the many "ifs" that bakers usually throw in to blame "something" or "somebody" else. Instead, bakers should remember that they have a future "if" they do something to increase consumption of bakery products, "if" they get doctors to increase use of bread in recommended diets, "if" they take up the fight against competitive foods, and "if" they try to convince dieticians, educators and housewives that bakery products are better, nutritious foods.

—BREAD IS THE STAFF OF LIFE—

## Dr. C. A. Elvehjem Elected President Of University

CHICAGO — Dr. Conrad A. Elvehjem, pioneer member of the scientific advisory committee of the American Institute of Baking, has been elected president of the University of Wisconsin. His appointment becomes effective July 1.

A member of the institute's advisory committee since its inception and chairman of the food and nutrition board of the National Research Council, Dr. Elvehjem has also served on AIB's Fleischmann Fund Committee since it was begun in 1950.

As one of America's outstanding biochemists, Dr. Elvehjem was honored by the institute at its annual meeting last October on the 20th anniversary of his isolation and identification of niacin as the anti-pellagra factor in 1937. His work with niacin, one of the essential B vitamins, helped make possible the bread enrichment program in the early 1940's. He was presented with the Golden Loaf Award at the October ceremonies.

## Minnesota Allied Baking Tradesmen Hold Bosses' Night

MINNEAPOLIS — Over 75 baking and milling industry sales representatives and executives recently attended the 9th annual Bosses' Night of the Minnesota Allied Trades of the Baking Industry at the Calhoun Beach Hotel here.

The Bosses' Night gives management an opportunity to meet with its sales personnel in order to better understand the purpose of the allied trades organization, according to H. C. Kayser, H. C. Kayser Co., Minneapolis, president of the allied trades. Representatives of management for companies serving the baking industry attended from various cities outside Minnesota.

The featured speaker of the evening was J. E. O'Connell, president of Eddy Bakeries chain in Minnesota, the Dakotas and Montana and recently elected director of the parent organization, the General Baking Co., New York City.

Mr. O'Connell is celebrating his 50th year in the baking industry, culminating his career which started with one bakery and now numbers 14 plants throughout the Upper Midwest.

During his talk on the baking industry and its operation under present day conditions, Mr. O'Connell pointed out that it has been his policy to promote top management from the ranks to illustrate his feeling that "it's the organization that's valuable in this fast game." Mr. O'Connell also explained his decision to affiliate with the General Baking Co. as a method of perpetuating his organization and the Eddy brands. From the general offices in Minneapolis and Helena, Mont., the same people will be used and the same method of doing business will be followed, Mr. O'Connell explained, since "No one buys bakeries today just to own bakeries, it's the organization they're after."

As a part of his interesting address, Mr. O'Connell paused to "talk about people, since we all have a selling job to do and people are the key. I have always appreciated the opportunity of working with people."

Mr. O'Connell, after 50 years in the industry, still is acting as operating head of his bakeries, in addition to owning horse, sheep and cattle ranches.

The Bosses' Night was under the direction of John S. Hansen, General Mills, Inc., Minneapolis, the immediate past president of the group. Mr. Kayser introduced all of the guests, giving special recognition to eight past presidents of the Allied Trades of the Baking Industry in Minnesota who were in attendance.



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ATKINSON FLOUR FOR BAKERS ONLY . . . MINNEAPOLIS



## ASBE

(Continued from page 9)

York. Mr. Favor emphasized that "the baking industry has become a science rather than an art whether we like it or not." He feels the baker should be aware of every scientific food discovery so it can be adapted to his industry.

Six criteria for the advantages thought to be gained from the use of emulsifiers, in Mr. Favor's opinion, are:

- Is it glossy?
- Will it whip well?
- Is it stable from mixer to oven?
- Does it provide a fine-grained, uniform cell structure and yet a good volume?
- Is it high in eating quality?
- Does it have a longer shelf life?

Arthur Hackett, Drake Bakeries, Inc., New York, substituted for Walter Jackson, of the New Standard Baking Co. in Philadelphia, with his report on continuous mixing of cake batter. Mr. Jackson, who was unable to attend the meeting because of his wife's illness, discussed the continuous mixing question from the baker's angle or the practical user's standpoint since previous discussions on American Society of Bakery Engineers' programs had discussed it from the technical and manufacturer's viewpoint.

The continuous mixing of cake batter is now an accepted practice because of recognized advantages, Mr. Jackson's paper pointed out. He described one installation in which a pre-mixer, holding tank, pump and continuous mixer used one-half the space of the five 80 qt. vertical mixers the unit replaced, leaving room in the cake mixing area for raw material storage. One man was used for the new unit instead of five under the old setup, the room was more sanitary, there was 8-10% greater yield from raw materials and the production per hour was 800 lb. instead of 650, thus keeping up with the oven.

Mr. Jackson's paper suggested the baker make a record of settings on the machine so that the minimum time can be used for changes from one variety to another. Suggested recordings were those of pump speed, head pressure, line pressure, rotor speed, air temperature, cup weight and air flow. When properly scheduled batters are used the time needed for changeover is at a minimum. Usually the progress is from light to dark colored batters.

Other hints included were that a batter can be started in the pre-mix tank as soon as the previous batter is sent into the holding tank. The whole system can be flushed down with water between mixes and it was recommended that hose outlets be available for that purpose.

In summarizing, Mr. Hackett pointed out that both he and Mr. Jackson had the opinion that continuous mixing provided a more sanitary installation, reduced material and labor cost, provided uniformity and quality as well as more floor space, and needed less power, less equipment, and less maintenance.

The final portion of the program included a paper on advances in cake and sweet goods packaging by John H. Herrick, Bestpak, Inc., Wellesley Hills, Mass. Mr. Herrick evaluated current packaging trends with the



**OVERSEAS HONOR**—During the annual meeting of the ASBE, British chapter affiliate chairman Harry Colbourne, Wonder Bakery, Ltd., London, England, presents a silver loving cup to president Harold M. Freund, Freund Baking Co., St. Louis, Mo., on behalf of the British Chapter Affiliate to the American Society of Bakery Engineers.

emphasis on future development because of this fast changing field. Mr. Herrick said that new packaging materials and machines to use them are constantly being developed, thus widening the scope of bakery production men since they must evaluate the new developments and make ready to use them.

In discussing what constitutes a good consumer package, Mr. Herrick was of the opinion that it should adequately protect the product, be capable of handling efficiently in production, have merchandising and consumer convenience value, and at the same time keep packaging costs at a minimum consistent with other essential requirements.

Several of the varieties of the present packages discussed by Mr. Herrick included the many varieties of window boxes for pound and sponge varieties, the open type trays overwrapped in cellophane and a new sleeve type package which provides greater visibility but at the same time corner protection for angel food and chiffon cakes.

Speaking of the paperboards used in packaging, Mr. Herrick said there had been several advancements in the surface treatment of these boards for increased grease and moisture protection, rigidity, handling, cost and appearance. He said that there is current investigation into adding a mold retardant on the surface of the paper board or in the glues used for laminating. This is very new, as is the research into incorporating flavors into board, although Mr. Herrick admitted that this would involve many problems in inventory and point of sale use.

"It looks as if the large wholesale bakery will fairly soon include box forming equipment, so the production man will actually be responsible for the last stage of packaging manufacture. A solid blended kraft will gain in importance as will bake-in containers. There will be more automatic forming equipment and setup devices to become familiar with and polyethylene film will make inroads in the packaging field because of its lower price as compared to cellophane, although at the present time cellophane has the edge in printability and clarity." He also expects machines in the bakery which will package small items directly from sheets of paper-board.

## Pie Quality And Fillings, Icings Reviewed

The final session of the American Society of Bakery Engineers' meeting included the technical discussion on icings and their deficiencies as well as two talks on wholesale pie production. An evaluation of the factors involved in processing and formulation of icings to determine the causes of breakdown and flaking was discussed by Nat H. Nash, American Breddo Corp., New York. "Icing must sell the complete product, since it is the only part of the bakery product which can be seen," Mr. Nash said.

He suggested the use of 8-15 parts of stabilizer, 30 parts of sugar and approximately 20 parts of water to be mixed to a rolling boil and added to 100 lb. sugar. The stabilizer will bind the product together, prevent stickiness on hot days and prevent crystal sugar going into solution. To illustrate this he showed a standardized icing weight on several products to show that 3 ounces of properly formulated icing can do the job of 5 ounces of unstabilized icing.

The importance of water in this formula came in for considerable discussion during a reading of the paper and the discussion from the floor later, with Mr. Nash pointing out that 1 lb. of water in a 150 lb. icing formula can make "all the difference" in the quality of the icing. Melting of the icing under changes in storage and humidity conditions will be increased as the water is increased.

An increase of 1.7% in the water will ruin the keeping quality and appearance, as disclosed by Mr. Nash's research. Also, if too little is used, the icing will crumble and peel.

"What should be one of the baking industry's best items is its most neglected one," A. Carl Aller, Hibiscus Baking Co., Inc., Miami, Fla., said to introduce his discussion of pie quality and cost. It is Mr. Aller's opinion that much high quality is necessary in the wholesale pie industry to meet today's consumer demands. Mr. Aller felt that low quality or stale pies "are like a plague—they affect the whole industry."

The speaker admitted that it was quite difficult to make a good pie and a profit at the same time because of high labor and material costs, but he is certain it can be done in even the smaller wholesale plants.

"If you are mixing by hand it's a good idea to put your laziest man on it. If the crust is over-mixed it won't take water and water is what makes the crust flaky," Mr. Aller said.

He also referred to an apple pie which he uses for customers who want something different for a club or closed meeting which includes ½ ounce rum and ½ ounce butter per pie, "and don't use rum flavor, use drinking rum," the speaker said. Generally he likes the flavor of the natural filling itself for most types of pies, however. He recommends that the pie flavor be kept as near natural as possible.

The final subject on the program was "Your Filling Can Be Your Fortune," presented by Jess G. McGhee, Wagner Baking Corp., Chicago. Mr. McGhee continued the discussion on quality pies started by Mr. Aller, feeling that with 7% of the nation

using bakers' pies "we are not getting our share." Mr. McGhee feels that in no other part of the baking industry are customers so skeptical of bakers' quality.

He feels that high quality pies and fillings come from the bakers' know-how, craftsmanship, attention to detail; they are all important, but the basic flavor must be in the flavor and the supervisor must always be on guard against poor preparation.

Mr. McGhee showed several methods of preparing fillings and handling ingredients for high quality wholesale production, and reviewed several formulas for pie fillings which were distributed to the engineers.

As the final part of the 1958 program, the meeting was turned over to the newly elected officers and Andreas Reising, president, announced his appointments for the 1958-59 year.

## Training and Education Benefit Baking Industry

Employee training and education received considerable attention during the afternoon session on March 4. Dr. L. A. Rumsey, Florida State University, Tallahassee, Florida, and Charles Meyer, Jr., Meyer's Bakery, Little Rock, Ark., shared the platform to cover the subject. The session chairman was John A. Wagner, American Stores, Inc., Philadelphia, Pennsylvania.

Dr. Rumsey made a report on the progress of education and training of employees in the baking industry. He introduced his remarks by reviewing the results of a first report which was made five years ago. At that time, he said, a large number of firms were doing no training, but many expressed concern over the situation.

Quoting from a report by the U.S. Department of Labor, Bureau of Labor Statistics, Dr. Rumsey said that one out of each five plant workers in the baking industry currently is a woman. The report continues to say that automation will limit the number of production workers in the industry, but more management and sales personnel will be needed. A higher proportion of jobs will call for baking specialists. This in turn will call for more training of personnel at the management level. He believes that additional personnel cannot be obtained from outside of the industry, but must be trained by the industry. Some firms with expansion plans are forced to delay them until their employees are properly trained, he reported.

There are two sources of competent workers, Dr. Rumsey explained. The first source is from employees in the plant which are developed by in-plant training programs. This is successful in many cases, but it frequently stops at the foreman or supervisory levels.

The second source of trained employees is a specialized school which can train at all levels.

This seems to be the big need presently, Dr. Rumsey said. Both production and sales employees must be trained. Some firms now have developed sales training programs, but only half of them have production training programs, according to the second questionnaire which was returned a short time ago.

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- 1 SPRING AND HARD WINTER WHEAT FLOURS
- 2 SOFT WHEAT FLOUR FOR CAKES, COOKIES, CRACKERS
- 3 RYE FLOURS
- 4 WHOLE WHEAT FLOURS



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## Formulas for Profit

# Apples Add Color, Taste Appeal to Cakes And Make Excellent Window Displays

### DUTCH APPLE CAKE

Cream together for 3 to 5 min. on low speed:

- 3 lb. flour
- 1 lb. 8 oz. emulsifying shortening

Mix together, add and mix for 3 to 5 min.:

- 1 lb. 12 oz. brown sugar
- 2 lb. 12 oz. granulated sugar
- 2 lb. 8 oz. flour
- 1½ oz. soda
- 2 oz. baking powder
- ¼ oz. cinnamon
- ¼ oz. nutmeg
- 3 oz. salt
- 3 lb. milk

Then blend together, add gradually and mix in for 3 to 5 min.:

- 1 No. 10 can medium chopped apples
- 1 lb. 8 oz. eggs
- 1 lb. milk

Deposit into pans of desired size. Sprinkle a little cinnamon sugar on each cake and also about 1 oz. chopped pecans. Place in the oven and bake at about 360° F.

**Note:** Use solid pack apples. Sift the brown sugar to eliminate lumps. Do not chop the apple too fine. Be sure to scrape down the bowl and creaming arm several times during the mixing stage.

### WHIPPED CREAM APPLE COFFEE CAKES (Fermented)

Cream together:

- 3 lb. 4 oz. sugar
- 1 lb. 4 oz. butter
- 1 lb. 4 oz. shortening
- 3 oz. salt
- 12 oz. milk solids (non-fat)
- ½ oz. lemon gratings

Add gradually:

- 14 oz. egg yolks

Then add:

- 6 lb. water (variable)

Add:

- 12 lb. bread flour
- 4 lb. pastry flour

Then add and mix in:

- 1 lb. yeast dissolved in 2 lb. water

Mix until smooth.

Dough temperature 80-82° F.

First rise about 2 hours.

To the bench 15 to 20 min. later.

Scale into 8 or 10-oz. pieces and round up. Then prepare 8x2-in. round layer cake pans by greasing heavily with butter. Then spread on the bottom of the pans about 2 oz. of a mixture made from 3 lb. brown sugar and ½ oz. cinnamon. Sprinkle currants on top and finish by placing sliced apples in a uniform pattern over the entire bottom.

Then roll out the rounded dough pieces so that they will fit the pans. Dock the pieces and place on top of the apples. Give medium short proof and bake at about 420° F. for approximately 30 min.

When baked, invert the pans and remove immediately. Allow to cool thoroughly. The cakes may then be covered on the sides with whipped cream. A border of whipped cream may be run on the top edges of the cakes with a large star tube.

### JONATHAN APPLE LOAF CAKES

Cream together for about 5 min.:

- 5 lb. sugar
- 2 lb. 4 oz. emulsifying shortening

Add:

- 2 lb. water

Sift together, add and mix in for about 2 min.:

- 1 lb. 4 oz. sugar
- 5 lb. cake flour
- 4 oz. baking powder
- 2¼ oz. salt
- ½ oz. cinnamon
- ¼ oz. allspice
- 8 oz. milk solids (non-fat)

Add and mix for 3 min. on second speed:

- 3 lb. 8 oz. eggs

Then add and mix until smooth:

- 2 lb. ground apples (peel and all but core)
- 2 lb. water

Deposit into loaf cake pans and bake at about 350° F. When baked and cool, ice the cakes as desired.

### ROMAN APPLE CAKES

Cream together:

- 1 lb. 8 oz. brown sugar
- 3 lb. granulated sugar
- 1 lb. 8 oz. shortening
- 1½ oz. salt
- ¼ oz. cinnamon
- 1/16 oz. nutmeg

Add gradually:

- 12 oz. whole eggs

Mix together and add:

- 2 oz. soda
- 2 lb. milk

Sift together and mix in:

- 5 lb. 4 oz. cake flour
- 1 oz. baking powder

Then mix in:

- 1 No. 10 can medium chopped apples

Deposit into pans of desired size. Sprinkle a little cinnamon sugar on each cake and also about 1 oz. pecans. Place in the oven and bake at about 360° F.

**Note:** Use solid pack apples. Sift the brown sugar to eliminate lumps. Dissolve the soda thoroughly. Do not chop the apples too fine.

### APPLE SAUCE CAKES (No. 1)

Cream together until light:

- 6 lb. brown sugar
- 2 lb. shortening
- 3 lb. chopped apples

Add gradually:

- 2 lb. 4 oz. eggs

Sift together, add alternately with the butter milk:

- 5 lb. cake flour
- 1½ oz. soda
- 1½ oz. baking powder
- 2 oz. salt
- 1 oz. cinnamon
- ½ oz. allspice
- 4 lb. buttermilk

Mix until smooth.

Deposit into pans of desired size and bake at about 360° F. After baking, and when cool, ice as desired.

### APPLE SAUCE CAKES (No. 2)

Mix together for 5 min. on second speed:

- 2 lb. cake flour
- 1 lb. 4 oz. shortening (emulsifying type)

Mix together, add and mix 5 min.:

- 3 lb. granulated sugar
- 12 oz. flour
- ¼ oz. cinnamon
- 1½ oz. baking powder
- ¼ oz. soda
- 1½ oz. salt

- A little lemon flavor
- 1 lb. 8 oz. ground apples

Then mix together, add slowly, and mix for 5 more min.:

- 1 lb. 12 oz. whole eggs
- 2 lb. 12 oz. ground apples

**Note:** Scrape the bowl down a number of times during the mixing period to insure a smooth batter. Deposit into layer cake pans of desired size and bake at 370° F. Ice with:

### Molasses Icing

Heat to 228° F.:

- 4 lb. 8 oz. sugar
- 2 lb. milk
- 12 oz. invert syrup

Allow this to cool. Then add and beat until light:

- 9 lb. powdered sugar
- 8 oz. butter
- 8 oz. shortening
- ½ oz. salt
- 12 oz. high grade molasses

### RAISIN APPLE SAUCE CAKES

Cream together on low speed for about 5 to 7 min.:

- 4 lb. brown sugar (sifted)
- 2 lb. 4 oz. granulated sugar
- 2 lb. 8 oz. emulsifying shortening
- 5 lb. cake flour
- 2½ oz. salt
- 1 oz. soda
- 3 oz. baking powder
- 1 oz. cinnamon
- ½ oz. cloves
- 2 lb. milk

Then add in 3 portions and mix for about 4 min. on slow speed:

- 3 lb. 8 oz. eggs

Then add and mix in thoroughly:

- 1 lb. 8 oz. ground seeded raisins
- 4 lb. apple sauce

Deposit into layer cake pans of desired size and bake at about 370° F. When baked and cooled, ice the cakes with the following icing:

### Raisin Icing

Beat together:

- 10 lb. powdered sugar
- 1 lb. honey
- 1 lb. egg whites
- 1 lb. 4 oz. water
- ¼ oz. salt
- ¼ oz. cream of tartar

When the icing stands up well, stir in 4 oz. ground seeded raisins.

This icing may be thinned down a little for easy spreading depending upon the consistency of the ground raisins.

### BAVARIAN APPLE CAKES

Base for pan lining. Sift together:

- 3 lb. 14 oz. pastry flour
- 2½ oz. baking powder

Place in a bowl and rub together the following ingredients:

- 6 oz. sugar
- 12 oz. shortening
- ½ oz. salt

Then add and mix smooth:

- 1 qt. milk
- 8 oz. yolks

Scale off into 6 oz. pieces and roll out similar to pie crust and line 8x1½-in. layer cake pans.

Fill pans with the following mixture:

- 1 No. 10 can chopped apples
- 2 lb. 4 oz. sugar
- ¾ oz. cinnamon
- ½ oz. salt
- 1 lb. seedless raisins
- 1 oz. butter
- 2 oz. tapioca (fine ground)

After the pans are filled, the edges of the bottom dough should be washed with egg wash and strips should be laid across the top, similar to the lattice work on cranberry pies.

### Dough for Strips

Rub together:

- 3 lb. pastry flour
- 2 lb. shortening
- 1½ oz. salt

Add and mix in:

- 18 oz. cold water

Then wash the strips with an egg wash and bake at about 380° F. After baking, when cool, sift powdered sugar on the cakes.

**Note:** This product should be consumed within 24 hours for the best eating quality.

## Assorted Apple CAKES For Appetite Appeal

A variety of cakes can be made by using apples as one of the ingredients. This popular fruit lends itself readily to making a variety that appeal to nearly everyone. The flavor blends ideally with other ingredients to make the finished cakes outstanding in flavor and appetite appeal. It will be found that these cakes are nice and moist, with excellent keeping qualities. As the apple crop this year is considerably larger than last, bakers have a golden opportunity to promote the sale of these cakes.

Due to the natural color, or combination of colors, apples are ideal for window display in conjunction with cakes. This holds true whether fresh, canned, frozen or dried apples are used. Window streamers and signs available from various supply companies, used when displaying the cakes, are bound to attract attention and to help stimulate sales.

It is an excellent idea to produce only two or three varieties of these cakes at a time. Be sure to tell your sales force all about them. By doing this they will be able to answer most of the questions asked by customers. It will also help them to concentrate on the cakes and do a much better job of promoting their sale. The baker who is willing to go all out to produce and merchandise these cakes is bound to get his share of the cake market. The tools are here—but he must make use of them.





A. J. Vander Voort

## A. J. Vander Voort

... technical editor, author of this monthly formula feature and conductor of the Bake Shop Trouble Shooter and the Do You Know feature (see page 16 of this issue), is head of the School of Baking, Dunwoody Industrial Institute, Minneapolis.

### WHOLE WHEAT APPLE SAUCE CAKES

**Cream together:**  
3 lb. brown sugar  
1 lb. 8 oz. shortening  
1 oz. soda  
 $\frac{1}{2}$  oz. cinnamon  
 $\frac{1}{4}$  oz. cloves  
 $\frac{1}{4}$  oz. mace  
1 oz. salt  
Lemon flavor to suit

**Add gradually:**  
10 oz. whole eggs

**Then mix in:**  
2 lb. chopped nuts  
3 lb. seedless raisins

**Then add alternately:**  
3 lb. whole wheat flour  
4 lb. 8 oz. apple sauce

Deposit into layer, loaf and cup cake pans. Bake at about 370-375° F.

**Note:** If the apple sauce is sweetened, decrease the sugar in the formula the same amount that is contained in the apple sauce.

#### Boiled Icing

**Boil to 242-244° F.:**  
6 lb. granulated sugar  
8 oz. invert sugar  
1 lb. 8 oz. water

**Then beat:**  
1 qt. egg whites  
Pinch of salt  
Pinch of cream of tartar

**While beating, add:**  
8 oz. powdered sugar

When stiff enough, add the boiled mass slowly and continue beating.

**Then add:**  
1 lb. powdered sugar  
Flavor to suit

### FRENCH APPLE CAKES

**Cream together:**  
4 lb. granulated sugar  
1 lb. 12 oz. shortening  
1 oz. salt  
Vanilla to suit

**Sift together:**  
4 lb. 8 oz. high grade cake flour  
 $1\frac{1}{2}$  oz. baking powder

**Add this alternately with:**  
2 lb. milk

**Then mix in until light:**  
2 lb. 8 oz. whole eggs

Scale 16 oz. of dough into round pans 8 in. by 2 in. Spread the dough out evenly in the pans and then sprinkle the following mixture on top:

#### Apple Mixture

**Grind fine:**  
4 lb. apples  
**Add and stir in thoroughly:**  
1 lb. sugar  
 $\frac{1}{2}$  oz. salt  
Cinnamon to suit

Bake the cakes at 360° F. When baked and cool, sift powdered sugar over them. In case the apples are flat, the addition of a little citric or tartaric acid will improve the flavor.

Some of these cakes may be covered with whipped cream, if desired, instead of powdered sugar. This makes an ideal combination.

### APPLE PEANUT BUTTER CAKE

**Cream together for about 3 min.:**

3 lb. cake flour  
2 lb. peanut butter  
1 lb. 12 oz. shortening  
(emulsifying type)

**Sift together and add:**

6 lb. granulated sugar  
2 lb. bread flour  
 $2\frac{1}{2}$  oz. salt  
 $3\frac{3}{4}$  oz. baking powder  
 $1\frac{1}{4}$  oz. soda  
1 oz. cinnamon  
 $\frac{1}{4}$  oz. nutmeg

**Then add and mix for about 3 min.:**

4 lb. ground apples

**Add and mix for about 3 min.:**

3 lb. 4 oz. whole eggs

**Mix in for about 5 min.:**

2 lb. 8 oz. ground apples

**Note:** Scrape down the bowl and creaming arm several times during the mixing period.

Deposit into layer cake pans of desired size and bake at about 360° F.

When baked and cooled, fill and cover with the following icing:

#### Malted Milk Icing

**Cream together:**

10 oz. shortening  
8 oz. butter  
4 oz. malted milk powder  
 $\frac{1}{4}$  oz. salt  
Vanilla to suit

**Add:**

1 lb. cocoa

**Then stir in:**

2 lb. milk

**Sift, add and beat together until smooth:**

7 lb. 8 oz. powdered sugar

The consistency of the icing may be controlled by increasing or decreasing the amount of powdered sugar.

### GERMAN APPLE CAKES

**Cream together:**

5 lb. sugar  
3 lb. shortening  
2 oz. salt  
Vanilla to suit

**Add gradually:**

4 lb. eggs

**Sift together and add:**

7 lb. cake flour  
 $2\frac{1}{2}$  oz. baking powder

**Add this alternately with:**

1 lb. water  
3 oz. glycerine (C.P.)

**Mix until smooth.**

Deposit 11 oz. in 8-in. layer pans. Then cover the batter with 8 oz. of the following mixture:

3 lb. canned apples (whole pieces)  
2 lb. sugar  
 $\frac{1}{4}$  oz. cinnamon  
 $\frac{1}{2}$  oz. salt

Bake at about 360° F. to a golden brown color.

### APPLE FLUFF CAKES (No. 1)

**Cream together:**

3 lb. cake flour  
1 lb. emulsifying shortening

**Blend together and add:**

3 lb. 4 oz. sugar  
3 oz. baking powder  
 $1\frac{1}{4}$  oz. salt  
 $\frac{1}{4}$  oz. cinnamon  
 $\frac{1}{8}$  oz. nutmeg

**Add in two stages:**

1 lb. 4 oz. eggs

**Then add and mix in until smooth:**

2 lb. apple sauce

**Add gradually:**

1 lb. 6 oz. milk  
Mix until smooth.

Deposit into pans of desired size and bake at about 380° F. After baking, and when cooled, ice as desired.

### APPLE FLUFF CAKES (No. 2)

**Cream together:**

3 lb. brown sugar  
1 lb. 4 oz. shortening  
 $\frac{3}{4}$  oz. soda  
1 oz. salt  
 $\frac{1}{4}$  oz. cinnamon  
 $\frac{1}{8}$  oz. allspice  
 $\frac{1}{8}$  oz. nutmeg

**Then add alternately and mix until smooth:**

2 lb. 12 oz. cake flour  
2 lb. butter milk

**Then add gradually:**

1 lb. 4 oz. whole eggs

**Add and mix in:**

1 lb. 8 oz. chopped fresh apples or unsweetened canned apples

Juice and grated rind of 1 lemon

Deposit into layer and loaf cake pans of desired size. Bake at about 350-360° F. When baked and cool, fill and cover the cakes with the following icing:

#### Caramel Icing

**Cook to 228° F.:**

2 lb. whole milk  
5 oz. butter  
4 lb. granulated sugar  
8 oz. corn syrup

**Remove from the fire and add:**

1 lb. 8 oz. caramel syrup

Allow this to cool.

**Then add and mix until smooth:**

4 lb. powdered sugar  
4 oz. butter

#### Caramel Syrup

**Cook to 325° F.:**

5 lb. granulated sugar  
1 lb. corn syrup or invert syrup  
1 qt. water

Then add gradually, stirring constantly 2 qt. whole milk. Allow this to cook back up to 220° F.

**Remove from the fire and mix in:**

8 oz. butter

### APPLE NUT LOAF CAKES

**Cream together for about 5 min. on second speed:**

6 lb. sugar  
5 lb. cake flour  
2 lb. shortening  
 $2\frac{1}{2}$  oz. salt  
12 oz. milk solids (non-fat)  
 $\frac{1}{2}$  oz. cinnamon  
 $1\frac{1}{4}$  oz. soda  
 $3\frac{1}{2}$  oz. baking powder  
4 lb. fine ground apples  
Vanilla to suit

**Mix together, add in two stages, for about 3 min.:**

2 lb. fine ground apples  
3 lb. 4 oz. eggs  
1 lb. chopped pecans or walnuts

Deposit into loaf cake pans of desired size and bake at about 350° F. After baking leave plain or ice as desired.

**Note:** Scrape down the bowl and creaming arm several times during mixing.

any way you

look at it...

you bake  
a better  
loaf with  
**WHITE SWAN FLOUR**  
bake after  
bake after bake

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572 Grain Exchange, Minneapolis 15, Minn.  
Mills at Springfield, Minn.

Also millers of: Pride of the Northwest  
• White Bear • White Gold • Purona

| MARCH |    |    |    |    |    |    | APRIL |    |    |    |    |    |    | MAY |    |    |    |    |    |    | JUNE |    |    |    |    |    |   |
|-------|----|----|----|----|----|----|-------|----|----|----|----|----|----|-----|----|----|----|----|----|----|------|----|----|----|----|----|---|
| S     | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  | S   | M  | T  | W  | T  | F  | S  | S    | M  | T  | W  | T  | F  | S |
|       | 2  | 3  | 4  | 5  | 6  | 7  | 1     | 2  | 3  | 4  | 5  | 6  | 1  | 2   | 3  | 4  | 5  | 6  | 7  | 1  | 2    | 3  | 4  | 5  | 6  | 7  |   |
| 8     | 9  | 10 | 11 | 12 | 13 | 14 | 15    | 16 | 17 | 18 | 19 | 20 | 8  | 9   | 10 | 11 | 12 | 13 | 14 | 8  | 9    | 10 | 11 | 12 | 13 | 14 |   |
| 15    | 16 | 17 | 18 | 19 | 20 | 21 | 21    | 22 | 23 | 24 | 25 | 26 | 15 | 16  | 17 | 18 | 19 | 20 | 21 | 15 | 16   | 17 | 18 | 19 | 20 | 21 |   |
| 22    | 23 | 24 | 25 | 26 | 27 | 28 | 27    | 28 | 29 | 30 |    |    | 22 | 23  | 24 | 25 | 26 | 27 | 28 | 22 | 23   | 24 | 25 | 26 | 27 | 28 |   |
| 29    | 30 | 31 |    |    |    |    |       |    |    |    |    |    | 29 | 30  | 31 |    |    |    |    | 29 | 30   |    |    |    |    |    |   |

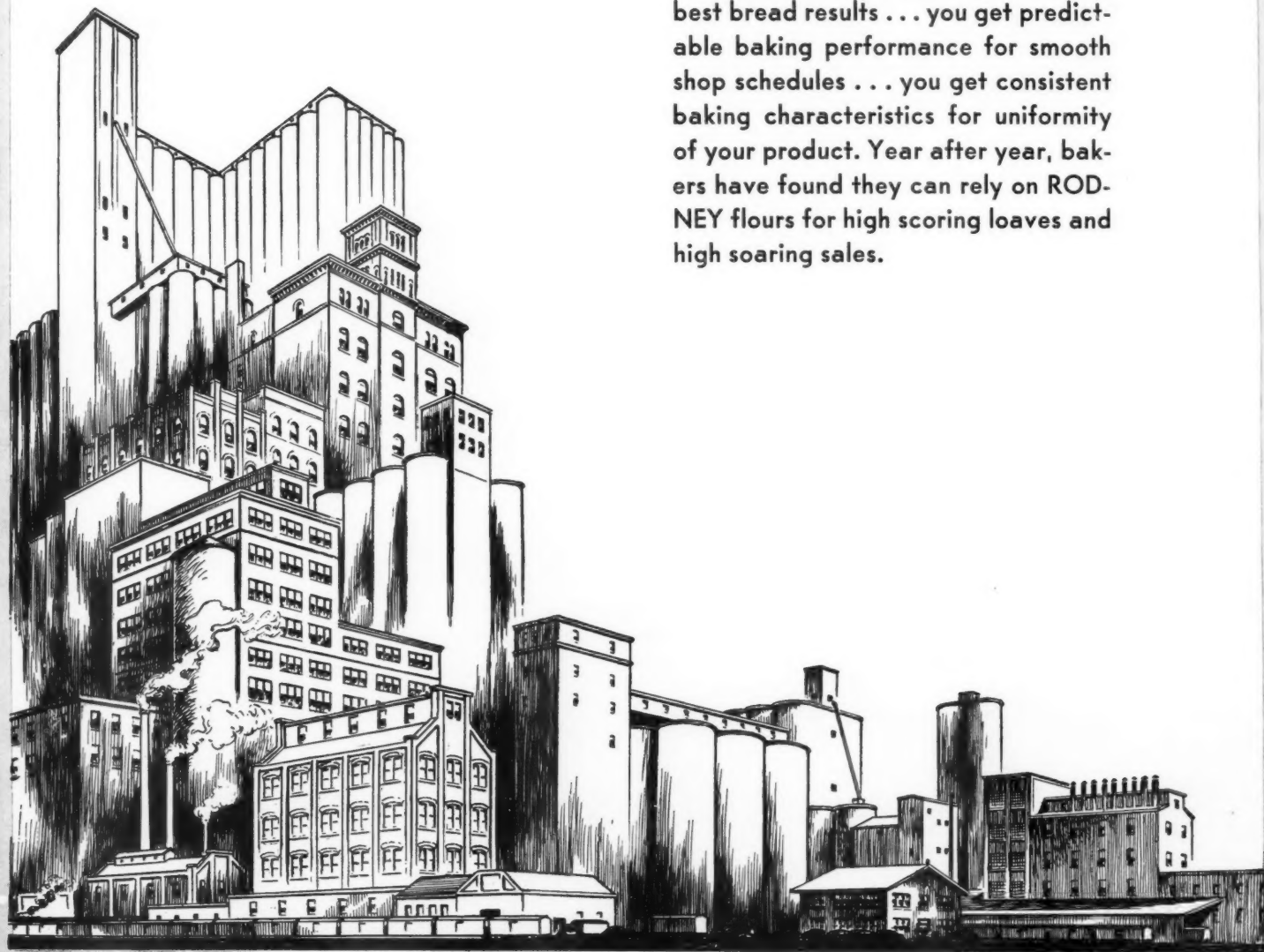
| JULY |    |    |    |    |    |    | AUGUST |    |    |    |    |    |    | SEPTEMBER |    |    |    |    |    |    | OCTOBER |    |    |    |    |    |   |
|------|----|----|----|----|----|----|--------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|---------|----|----|----|----|----|---|
| S    | M  | T  | W  | T  | F  | S  | S      | M  | T  | W  | T  | F  | S  | S         | M  | T  | W  | T  | F  | S  | S       | M  | T  | W  | T  | F  | S |
|      | 1  | 2  | 3  | 4  | 5  |    | 1      | 2  |    |    |    |    | 1  | 2         | 3  | 4  | 5  | 6  |    | 1  | 2       | 3  | 4  | 5  | 6  |    |   |
| 6    | 7  | 8  | 9  | 10 | 11 | 12 | 3      | 4  | 5  | 6  | 7  | 8  | 7  | 8         | 9  | 10 | 11 | 12 | 13 | 5  | 6       | 7  | 8  | 9  | 10 | 11 |   |
| 13   | 14 | 15 | 16 | 17 | 18 | 19 | 10     | 11 | 12 | 13 | 14 | 15 | 14 | 15        | 16 | 17 | 18 | 19 | 20 | 12 | 13      | 14 | 15 | 16 | 17 | 18 |   |
| 20   | 21 | 22 | 23 | 24 | 25 | 26 | 17     | 18 | 19 | 20 | 21 | 22 | 21 | 22        | 23 | 24 | 25 | 26 | 27 | 19 | 20      | 21 | 22 | 23 | 24 | 25 |   |
| 27   | 28 | 29 | 30 | 31 |    |    | 24     | 25 | 26 | 27 | 28 | 29 | 28 | 29        | 30 |    |    |    |    | 26 | 27      | 28 | 29 | 30 |    |    |   |
|      |    |    |    |    |    |    | 31     |    |    |    |    |    |    |           |    |    |    |    |    |    |         |    |    |    |    |    |   |

| NOVEMBER |    |    |    |    |    |    | DECEMBER |    |    |    |    |    |    | JANUARY |    |    |    |    |    |    | FEBRUARY |    |    |    |    |   |   |
|----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|---------|----|----|----|----|----|----|----------|----|----|----|----|---|---|
| S        | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  | S       | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F | S |
|          | 2  | 3  | 4  | 5  | 6  | 7  | 1        | 2  | 3  | 4  | 5  | 6  | 1  | 2       | 3  | 4  | 5  | 6  | 7  | 1  | 2        | 3  | 4  | 5  | 6  | 7 |   |
| 8        | 9  | 10 | 11 | 12 | 13 | 14 | 7        | 8  | 9  | 10 | 11 | 12 | 8  | 9       | 10 | 11 | 12 | 13 | 8  | 9  | 10       | 11 | 12 | 13 | 14 |   |   |
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| 22       | 23 | 24 | 25 | 26 | 27 | 28 | 21       | 22 | 23 | 24 | 25 | 26 | 18 | 19      | 20 | 21 | 22 | 23 | 22 | 23 | 24       | 25 | 26 | 27 | 28 |   |   |
| 29       | 30 |    |    |    |    |    | 28       | 29 | 30 | 31 |    |    | 25 | 26      | 27 | 28 | 29 | 30 |    |    |          |    |    |    |    |   |   |



By every standard of measurement, RODNEY flours give top performance. You get the right baking qualities for best bread results . . . you get predictable baking performance for smooth shop schedules . . . you get consistent baking characteristics for uniformity of your product. Year after year, bakers have found they can rely on RODNEY flours for high scoring loaves and high soaring sales.



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Uncle: "You boys of today want too much money. Do you know what I was getting when I married your aunt?"

Nephew: "No, and I'll bet you didn't either."

A racetrack is a place where windows clean people.

An Australian was trying to impress a Texan with the wonders of his country but then the Texan saw a kangaroo. Drawled the man from the Lone Star State: "Ah'll grant you one thing, that's for sure. Your grasshoppers are bigger'n ours."

Announcer: "And now for the news that happened during the commercial."

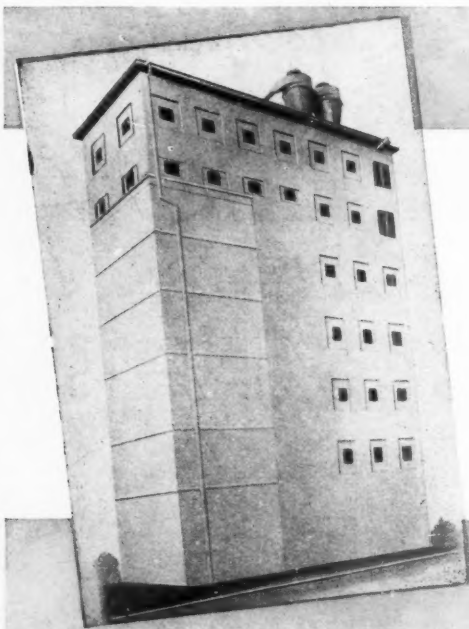
Came the day of their 25th wedding anniversary and the man of the house started out to do his work in the fields as usual. "John," his wife called. "Don't you know what day this is?" "Yes, indeed I do," said John, smoothly.

"Well, how are we going to celebrate it?" persisted his wife. "Sure and I don't know, Maggie," said John, scratching his head in puzzlement. "How about two minutes of silence?"

"I want to get a corset for my wife." "What bust?" "Nuthin. It just wore out."



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WEBER'S BULK FLOUR PLANT, pictured at the left, is an integral part of today's modern flour mill. The process of converting the milling industry from sacks to bulk requires modern bulk flour storage and handling facilities to replace the old sacked storage warehouse.

**THE WEBER FLOUR MILLS CO.**  
**SALINA, KANSAS**



▲ Southeastern Mills, Inc., Rome, Georgia, is a combination wheat flour and corn meal mill with a daily capacity of 1,000 sacks of each product.

## SOUTHEASTERN MILLS, INC. MEETS MARKET REQUIREMENTS BY USING W&T Flour Treatment

Southeastern Mills, Inc., serves the Southern market with traditionally Southern cereal grain products. These are produced with the help of Wallace & Tiernan's flour treatment processes, experience, and leadership in meeting the challenges of modern milling.

The "dead white" flour of the Southern market is achieved with Beta Chloral<sup>®</sup> and Novadelox<sup>®</sup>—Beta Chloral<sup>®</sup> for whitening and pH control, Novadelox<sup>®</sup> for best color dress. Both Beta Chloral<sup>®</sup> gas and Novadelox<sup>®</sup> powder are fed through W&T's dependable, easy-to-operate control units.

The bakery trade is supplied with flour treated to optimum maturity to produce doughs of good machinability — doughs that won't "stick-up." Here, the modern Dyox<sup>®</sup> Process applies chlorine dioxide gas to the flour streams with pin-point accuracy...without waste of chemical ingredients. The Dyox<sup>®</sup> Process *generates* chlorine dioxide gas as it is needed for use — without storage. The gas is produced economically, dependably, accurately.

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**WALLACE & TIERNAN INCORPORATED**

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REPRESENTATIVES IN PRINCIPAL CITIES

N-93



▲ Mill employee setting the single control to apply Beta Chloral<sup>®</sup> to mill stream. Individual stream control; accurate, easily-read meters; rugged construction are built-in features of the W & T Beta Chloral<sup>®</sup> control unit.

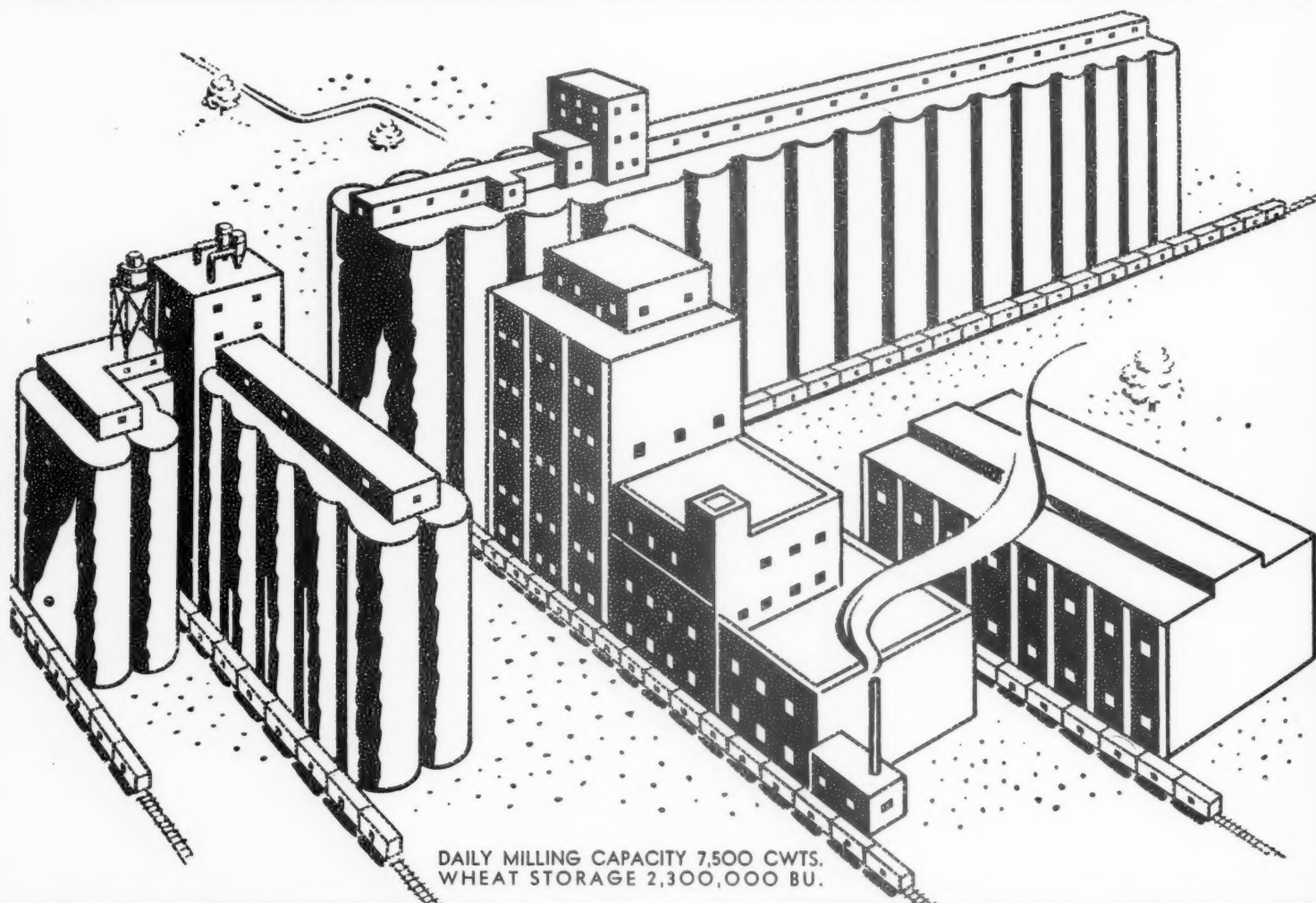


▲ Novadelox<sup>®</sup> being placed into the hopper of the W&T Novadel Feeder—the mill's insurance of optimum color removal.



▲ Dyox<sup>®</sup> control unit for the manufacture of chlorine dioxide gas as it is needed—and the reliable metering of the gas to the individual flour streams.

"If it's **I-H** milled it's good flour"



DAILY MILLING CAPACITY 7,500 CWTs.  
WHEAT STORAGE 2,300,000 BU.

**I-H**

*The* **ISMERT-HINCKE** *Milling Company*

KANSAS CITY, MISSOURI

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